UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

December 13, 1994

Mr. David Crosson
Infocus Inc.
707 State Road, Suite 102
Princeton, NJ 08540-1434

Dear Mr. Crosson:

Thank you for your November 17, 1994 letter in which you forwarded information concerning a remediation process in which mercury can be recovered and recycled.

As you may know, the U. S. Environmental Protection Agency operates the Superfund Innovative Technology Evaluation Program (SITE). This program supports development of technologies for assessing and treating wastes at Superfund sites. The demonstration program provides an opportunity for technology developers to demonstrate their technologies' capabilities to successfully process and remediate Superfund waste. Success in EPA's SITE Program may facilitate consideration of your technology at appropriate Superfund sites in New England. You may wish to contact John Martin, SITE Program contact, at (513) 569-7758 or Ruth Bleyler, Regional Liason at (617) 573-5792.

In addition, I have forwarded the information which you sent, to John Hackler of our Solid Waste and Waste Minimization Program. John may be reached at (617) 573-9670. I have similarly notified Mark Mahoney of our Pollution Prevention Program. Mark may be reached at (617) 565-1155.

As mercury contaminated soils may also be found at facilities conducting cleanup under the Resource Conservation and Recovery Act (RCRA), I have notified Matt Hoagland of the RCRA Corrective Action Program of your services. Matt may be reached at (617) 573-5790.

Finally, I have enclosed an application for EPA's Vendor Information System for Innovative Treatment Technologies. You may wish to use this application to contact EPA's Technology Innovation Office for inclusion in the VISITT data base.

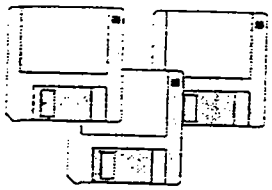
VISITT gives innovative technology companies an opportunity to market their capabilities nationally, and enables federal, state and private sector environmental professionals to screen innovative technologies for application to specific sites.

If you have questions or are in need of additional assistance, please contact John Smaldone, of my staff, at (617) 223-5519.

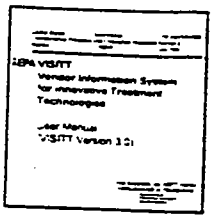
Sincerely,

Dennis Huebner, Chief
Superfund I Branch

cc: John Hackler ✓
Mark Mahoney
Ruth Bleyler
Matt Hoagland



Ordering VISITT 3.0



To order the VISITT 3.0 diskettes and user manual, and to become a registered user, please complete this order and registration form and mail or fax it to the location indicated below. VISITT 3.0 is available at NO CHARGE. VISITT 3.0 also is available on EPA's CLU-IN Bulletin Board (see page 4 for details).

IMPORTANT: All registered users of version 1.0 and 2.0 should complete this form and mail or fax it to the location indicated below.

Special Note to EPA Staff: TIO is working directly with EPA Headquarters and Regional offices, EPA laboratories, and EPA libraries to install VISITT on LANs and at workstations. For more information, contact the OSWER Technology Innovation Office.

U.S. EPA Vendor Information System for Innovative Treatment Technologies (VISITT) Version 3.0 Order and Registration Form

Mail to : U.S. EPA/NCEPI
P.O. Box 42419
Cincinnati, OH 45242-0419

or

Fax to: U.S. EPA/NCEPI
(513) 891-6685
(Verification : (513) 891-6561)

Please type or print legibly. Allow 3-4 weeks for delivery.

Name: _____

Company/Agency _____

Street _____

City _____ State _____ Zip Code _____

Country _____ Telephone Number _____

Date Ordered _____

_____ Register me as a VISITT user.

_____ Send me VISITT 3.0 diskettes and a user manual.

Diskette size (check one) 3-1/2 " _____ 5-1/4" _____

_____ Send me a VISITT 3.0 user manual *only*.

_____ I am an innovative treatment technology vendor and would like to receive an application to be included in VISITT 4.0. Place me on the VISITT 4.0 Application Mailing List.

_____ I am an innovative measurement or monitoring technology vendor and would like to receive an application for the new measurement and monitoring vendor database. Place me on the Measurement/Monitoring Database Application Mailing List.

Insert

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02203-2211

August 12, 1994

Mr. Paul Raftery, President
Western Oil
333 Cottage Street
Pawtucket, Rhode Island 02860

Dear Mr. Raftery:

This is in response to your letter dated May 24, 1994. Your letter states that you are a licensed hazardous waste transporter and that you propose to test waste oil using a Dexsil Clor-D-Tect test kit. Based on the results of the test, you ask whether waste oil with a total halogen content of less than one thousand ppm could be classified as a Massachusetts hazardous waste code MA98 (off-specification) rather than as MA01 (hazardous waste.)

The Dexsil Clor-D-Tect test kit has been referenced in the proposed SW-846 Method No. 9077 (Clor-D-Tect 1000). However, this is only a proposed regulation. Thus, the Dexsil Clor-D-Tect test is not yet an approved EPA method to determine total halogen content in waste oil.

EPA believes that waste oil with a halogen content less than 1000 ppm (determined by a currently valid test method) may be classified as an off-specification fuel.[1] Waste oil with a halogen content greater than 1000 ppm is presumed to be a hazardous waste and subject to the applicable regulations set out at 40 C.F.R. Parts 260-266, 268, 270 and 124.

Finally, pursuant to Section 3009 of RCRA, 42 U.S.C. § 6929, states are authorized to promulgate regulatory requirements more stringent than the federal analogues. Whether waste oil is properly classified as MA98 or MA01 is regulated under federally authorized Commonwealth of Massachusetts hazardous waste regulations. Therefore, please contact the Massachusetts Department of Environmental Protection for a definitive answer to this question.

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If you have any questions regarding this matter you may contact Mel R. Cheeks at 617-223-5590.

Sincerely,

Matthew R. Hoagland, Chief
Waste Regulation Section
ME/NH/VT

[1]vol no. [57] Federal Register/Thursday, September 10, 1992/pg. 41601, VI.D.6, "A decision to market used oil as an off-specification fuel is solely an economic decision depending on the costs associated with marketing used oil as on-specification fuel (i.e., used oil fuel meeting the specification limits). In the former case, used oil is shipped, as generated or consolidated without any processing, to an industrial boiler or furnace. In the later case, however, used oil is blended or processed to produce on-specification used oil fuel and is analyzed to document the claim that it meets the specification limits."

cc: Fred Friedman
RCRA Library

Lisa Papetti
MA Section

Steve Berkstrom
MADEP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 30 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Regulatory Determination on Used Oil Filters

FROM: Sylvia Lowrance, Director
Office of Solid Waste

TO: Robert L. Duprey, Director (8HWM-RI)
Hazardous Waste Management Division
EPA Region VIII

Thank you for your memorandum of August 30, 1990, requesting a regulatory interpretation of the status of used oil filters under the new Toxicity Characteristic (TC). In your memorandum, you inquired about used oil filters that are crushed in vehicle maintenance shops, where a certain portion of the residual used oil in the filter is separated from the filter. The answers to the specific questions you asked are listed below.

1. The Toxicity Characteristic Leaching Procedure (TCLP) is performed on used oil filters by crushing, cutting or grinding the waste (filter plus contents) until the pieces are smaller than 1 centimeter in their narrowest dimension (and thus are capable of passing through a 9.5 mm standard sieve). See Step No. 7.3 of the TCLP. The surface area criterion referred to in Step 7.3 does not apply to used oil filters. (Note: If the generator recycles both the used oil and metal, you do not need to test because recycling of both types of materials is exempted from hazardous waste regulation as discussed below.)

2. and 3. Assuming a used oil filter exhibits the TC, you had inquired whether the act of crushing filters is regulated treatment or exempt recycling. Generally, the types of used oil filter crushers you described would not be regulated if the used oil was being recycled (see 40 CFR 261.6(a)(2)(iii) and (a)(3)(iii)). That is, since the purpose of the crushing is to remove the used oil for recycling, we view the crushing to fall within the used oil recycling exemption. The crushing may be performed on- or off-site, for profit or not. The determining factor is whether the used oil will be recycled. The filter may be shipped off-site for crushing under the [illegible] exemption, [illegible] the oil is collected for recycling.

4. Generally, automotive oil filters are not considered to be containers because they are designed to filter particulates from oil that circulates through them, not devices for the storage of oil. As a result, a filter could not be an "empty container" under 40 CFR 261.7. However, as described next, a drained or crushed filter is considered scrap metal, and scrap metal is exempt from regulation when recycled.

Under the definition of "solid waste," EPA has determined that "recycled hazardous scrap metal is a solid waste when disposed of or recycled" (see 50 FR 624, January 4, 1985). However, pursuant to section 261.6(a)(3)(iv), hazardous scrap metal is exempted from Subtitle C regulation when recycled. The scrap metal recycling exemption in 40 CFR 261.6(a)(3)(iv) is applicable to used oil filters (scrap metal) that are going to be recycled. However, an undrained or uncrushed oil filter would contain too much oil to qualify for the scrap metal exemption. The January 4, 1985 preamble provided examples of items qualifying for the exemption, such as bars, turnings, rods, sheets, wire (i.e., scrap metal that is going to be recycled to recover their metal content) and examples that do not qualify, including metal-containing waste with a significant liquid component, such as spent batteries.

To increase the probability that the used oil filter (hazardous scrap metal) will qualify for the scrap metal recycling exemption, the generator or recycling facility should drain (gravity) the filter for an amount of time sufficient to ensure that all free-flowing oil is removed. The amount of drain time will vary based on a number of variables, including the size of the filter and temperature (both ambient and that of the filter). Alternately, the generator or recycling facility could crush the oil filter using the most appropriate crushing method that will force excess residual oil from the filter. We will be examining this issue further, but we currently have no information indicating that substantial amounts of oil will remain in the filter after either sufficient draining or adequate crushing. As a best operating practice, the Agency recommends that the generator or recycling facility both drain and crush used oil filters to be certain that the used oil filters would qualify for the hazardous scrap metal recycling exemption.

If the crushed or drained filter will be recycled, it is unnecessary to determine whether it exhibits the TC because the scrap metal exemption is applicable. It would also be unnecessary to manifest these used oil filters if they will be recycled. However, if the filter will be disposed of, the generator must determine if it is hazardous under the TC. If the filter is hazardous waste, the [illegible] and 268 regulations apply to the generator, and Parts 264 [illegible] apply to the treatment, storage and disposal facilities [illegible] waste filters may be disposed in a Subtitle D facility.

Finally, in the sales brochures you sent, there was mention of an open container used to accumulate the used oil after the filter was crushed. (Currently, used oil accumulation by generators is not regulated if the used oil is recycled, but EPA did propose that such containers be kept closed. See 50 FR 49252, November 29, 1985.) Storage or accumulation of characteristically hazardous used oil is regulated if the used oil is to be disposed of; in that case, the containers must be closed except when adding or removing the used oil (per §265.173(a)).

Please contact Daryl Moore at (202) 475-8551 if you have any additional questions on the applicability of the Federal hazardous waste regulations with respect to used oil filters.

cc: Waste Management Division Directors, Regions I - VII and IX - X
Jeff Denit
RCRA/Superfund Hotline
Regional TC Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02203-2211

July 6, 1994

Randall H. Morse
Vice President
Schleicher & Schuell
10 Opticle Avenue
P.O. Box 2012
Keene, NH 03431-2012

Dear Mr. Morse:

This letter is in response to your letter dated May 6, 1994 regarding the waste handling requirements for ethidium bromide EtBr. In your letter you stated that EtBr is commonly used by scientists in molecular biology research laboratories to stain double-stranded DNA fractionated in agarose electrophoresis gels.

You specifically asked the following questions in your letter:

- Is ethidium bromide EtBr controlled by EPA?
- Is it found on any list of any sub-division of the EPA, such as TSCA, SARA, or RCRA?
- What EPA regulations govern EtBr?
- What concentrations are permissible for drain disposal?
- What distinctions are made for the disposal of EtBr as a solid waste (on a filter), or as a liquid waste (down the drain)?
- What are the appropriate regulations for disposal as a liquid or as a solid?

Please be advised that the information provided here is with reference to Federal Regulations only. Individual states are very likely to have laws that are broader or more stringent than Federal laws.

Under RCRA Subtitle C hazardous waste regulations, each generator of a waste is responsible for making a hazardous waste determination under 40 CFR §262.11. If the waste exhibits one of the four characteristics of hazardous waste identified in Subpart C of Part 261 (i.e. ignitability, corrosivity, reactivity or toxicity) or is a waste listed in Subpart D of Part 261, it must be managed in accordance with Federal hazardous waste

regulations. EtBr is not listed in Subpart D of Part 261. The determination of EtBr as a characteristic hazardous waste would be accomplished by testing it in accordance with the procedures stated in Subpart C of Part 261.

During telephone conversations with our office you indicated that your company was developing a product that would treat the EtBr waste stream on-site. The treatment of spent or used EtBr, if determined to be a hazardous waste, would not require the issuance of a permit for on-site treatment prior to disposal so long as the treatment occurs within 90 days of generation and the treatment takes place in an accumulation container or tank in conformance with the requirements of 40 C.F.R. § 262.34 and Subparts I and J of 40 C.F.R. Part 265 (Standards for containers and tank systems). You can contact Mel Cheeks for further information pertaining to Federal RCRA regulations.

The General Pretreatment Regulations at 40 CFR Part 403 govern discharges to municipal sewer systems. For those industrial sources that are covered by a specific categorical pretreatment standard, that facility must comply with the specific effluent guidelines established in that category. However, if local ordinances/requirements are established by municipalities that are more stringent than categorical limits, the more stringent of the two standards (i.e., local limits or categorical standards) would need to be complied with. For specific information pertaining to these regulations contact Mark Spinale of the Water Management Division of EPA.

Regarding the discharge of EtBr through a sewer system into the ground, the Safe Drinking Water Act, Part C (42 U.S.C. 300f et seq.) mandates regulation of underground injection of fluids through wells. EPA has promulgated a series of Underground Injection Control (UIC) regulations (40 CFR Parts 144, 145, 146) under this authority to protect underground sources of drinking water (USDW). All the New England states have UIC Programs that have been approved and delegated primacy per 40 CFR Part 145 to implement these regulations. States, as a condition of UIC primacy may adopt regulations more stringent than EPA. Owners or operators of injection wells are prohibited from allowing the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 141, or may otherwise adversely affect human health. In New England, UIC Programs regulate primarily Class V wells which are those that discharge into or above a USDW. Floor drainage, liquid wastes, process wastewater, treated and untreated sewage, stormwater, washwater, spill drainage, etc. discharged to Class V UIC wells such as a well, leach field, leaching pit, leaching trench, dry well or a cesspool in commercial and industrial facilities pose a significant hazard to drinking water. Class V UIC wells used to inject RCRA defined hazardous waste banned by UIC regulations and Section 3020(a) of RCRA are reclassified Class IV UIC wells and are prohibited. For

specific information pertaining to these regulations contact David Delaney.

The Superfund Amendments and Reauthorization Act (SARA) has four major regulatory provisions, they are emergency planning, emergency notification, community right to know reporting requirements and toxic chemical reporting (Attachment A). For more specific information regarding the SARA program contact Dwight Peavey and Don Mackie.

The Toxic Substances Control Act (TSCA) has four major regulatory provisions, they are inventory and pre-manufacture notification, chemical testing, reporting and recordkeeping and regulation of hazardous chemical substances (Attachment B). For specific information pertaining to the TSCA program contact Kim Schweisberg.

Contaminated EtBr could possibly be classified as a medical waste if it were used in medical applications. Each state maintains their own medical waste program. EPA currently does not regulate medical waste. Attachment C is a list of state contacts that handle medical waste issues.

You may purchase your own set of Federal Regulations by contacting: Superintendent of Documents, Government Printing Office, Washington, DC 20402, (202) 783-3238. Attachment D provides a list of address and phone numbers for EPA-New England staff who can provide further assistance.

Sincerely,

Matthew R. Hoagland, Chief
ME/NH/VT Waste Regulation Section

cc: [redacted]
Research Library
Mark Spinale - EPA
David Delaney - EPA
Kim E. Schweisbeg - EPA
Joan Jouzaitis - EPA

2H EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW

Purposes

The Superfund Amendments and Reauthorization Act (SARA) of 1986 was enacted into law on October 17, 1986. An important component of the SARA provisions is Title III: Emergency Planning and Community Right-to-Know Act of 1986. Title III establishes requirements for Federal, State and local governments and industry regarding emergency planning and "community right-to-know" reporting on hazardous and toxic chemicals. This legislation builds upon EPA's Chemical Emergency Preparedness Program (CEPP) and numerous State and local programs aimed at helping communities to better meet their responsibilities in regard to potential chemical emergencies. The community right-to-know provisions will help to increase the public's knowledge and access to information on the presence of hazardous chemicals in their communities and releases of these chemicals into the environment. States and communities, working with facilities, will be better able to improve chemical safety and protect public health and the environment.

The emergency planning and community right-to-know provisions have four major sections: emergency planning (Sections 301-303), emergency releases notification (Section 304), community right-to-know reporting requirements (Sections 311, 312), and toxic chemical release reporting emissions inventory (Section 313). Information from these four reporting requirements will help States and communities develop a broad perspective of chemical hazards for the entire community as well as for individual facilities.

Major Regulatory Provisions

Emergency Planning

Sections 301-303 of the law mandate that the Governor of each State organize a State Emergency Response Commission (SERC) which in turn designates Local Emergency Planning Committees (LEPC). The local committees are responsible for evaluating the available resources and developing emergency response plans for their communities.

Emergency Notification

Under Section 304, facilities must immediately notify the Local Emergency Planning Committees and the State Emergency Response Commissions likely to be affected if there is a release into the environment of a listed hazardous substance that exceeds the reportable quantity for that substance. Substances subject to this requirement are those on the list of 366 extremely hazardous substances as published in the Federal Register (40 CFR 355) or on a list of 721 substances subject to the emergency notification requirements under CERCLA Section 103(a) 40 CFR 302.4). Some chemicals are common to both lists.

Enforcement Authorities

Section 325 of the Emergency Planning and Community Right-to-Know Act addresses the penalties for failure to comply with the requirements of this law. Civil and administrative penalties ranging from up to $10,000 - $75,000 per violation can be assessed to facilities that fail to comply with the emergency planning (Section 302), emergency notification (Section 304), community right-to-know (Sections 311 and 312), toxic chemical release (Section 313) and trade secret (Sections 322 and 323) reporting requirements.

Criminal penalties up to $50,000 or five years in prison may also be given to any person who knowingly and willfully fails to provide emergency release notification. Penalties of not more than $20,000 and/or up to one year in prison may be given to any person who knowingly and willfully discloses any information entitled to protection as a trade secret. In addition, Section 326 allows citizens to initiate civil actions against EPA, State Emergency Rsponse Commissions, and/or the owner or operator of a facility for failure to meet the requirements of the emergency planning and community right-to-know provisions. A State Emergency Response Commission, Local Emergency Planning Committee, State or local government may institute actions against facility owner/operators for failure to provide trade secret information.

2E TOXIC SUBSTANCES CONTROL ACT (TSCA)

Purposes

The Toxic Substances Control Act (TSCA), signed into law in October 1976, provides EPA with broad authority to regulate chemicals and chemical substances whose manufacture, processing, distribution in commerce, use or disposal may present an unreasonable risk of injury to health or the environment. The Act was enacted to keep harmful chemicals out of the environment and to fill the gaps in existing environmental laws in the areas of toxic substances.

The Act deals with all toxic chemicals planned for production, produced, imported, or exported from the country. TSCA applies primarily to manufacturers, distributors, processors, and importers of chemicals. The only exceptions to this authority are:

- Pesticides (as defined in FIFRA as a pesticide);
- Tobacco or tobacco products;
- Source material by-products or special nuclear material as defined by the Atomic Energy Act; and
- Food, food additives, drugs, and cosmetics under the Federal Food, Drug and Cosmetic Act.

Major Regulatory Provisions

- Inventory and Pre-Manufacture Notification. If EPA determines that a new chemical substance poses a risk to health or the environment, it can prohibit or regulate its manufacture.

  EPA has published an inventory of existing chemicals. Substances not on that list are considered "new," and require Pre-manufacture Notifications (PMN) to be submitted to EPA. Before manufacturing or importing new chemicals, or processing existing chemicals for significant new uses, notice must be submitted at least 90 days before manufacture, processing, shipping or sales (TSCA, Section 5). If EPA does not make a declaration within 90 days to restrict the product, then full marketing can begin, and the chemical is added to the inventory. Conversely, EPA may review the product data for an additional 90 days; negotiate for suitable data; prohibit manufacture or distribution until risk data are available; reject the PMN for insufficient data; or, pending development of a Section 6 rule, completely ban the product from the market.

- Testing. Under TSCA, Section 4, EPA can require product testing of any substance which "may present an unreasonable risk of injury to health or to the environment." Some testing standards are proposed, but no testing requirements for specific chemicals are yet in effect.

- Imminent Hazard. Imminent hazard is defined as a chemical substance or mixture causing an imminent and unreasonable risk of serious or widespread injury to health or the environment. When such a condition prevails, EPA is authorized by TSCA, Section 7 to bring action in U.S. District Court. Remedies include:

  - Seizure of the chemical or any article containing such chemical;
  - Notice of risk to the affected population; or
  - Recall, replacement or repurchase of the substance.

Enforcement Authority

- EPA Inspection Authority. Under Section 11, EPA "and duly designated representatives of the Administrator" may inspect any establishment, facility, or other premises in which chemical substances are manufactured, processed, stored, or used before or after their distribution in commerce, and any conveyance being used to transport chemical substances, mixtures, or such articles in connection with distribution in commerce.

  An inspection shall extend to all things within the premises or conveyance inspected (including records, files, papers, processes, controls and facilities) bearing on whether the requirements of TSCA applicable to the chemical substances or mixtures within such premises or conveyance have been complied with. The only exceptions are that no inspection shall extend to financial data, or research data (other than data required under TSCA or regulations), unless the nature and extent of such data are described with reasonable specificity in the notice of inspection.

  Inspections are to be commenced and completed with "reasonable promptness," and conducted at "reasonable times," within "reasonable limits," and in a "reasonable manner." Inspection may only be made upon:

  - Presentation of proper credentials;
  - Presentation of a written notice of inspection to the owner, operator or agent in charge of the premises or conveyance; and
  - Separate notice for "each such inspection," but a notice shall not be required for each entry made during the period covered by the inspection.

- Subpoena Authority. EPA may require the attendance and testimony of witnesses under oath, and/or the production of documents. Subpoenas do not have to be issued by a Court, and can be used to investigate any activity TSCA prohibits.

- Authority to Regulate Imports. EPA has authority to ensure that imported chemicals at a facility have the proper import documents. U.S. customs inspectors may refuse entry into the United States of foreign chemicals that fail to meet TSCA requirements.

2/94

MEDICAL WASTE CONTACTS

Washington, DC and Region I

U. S. Environmental Protection Agency

Special Programs Section (OS-332)
Office of Solid Waste
U. S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Michaelle Wilson, Chief, Special Programs: (202) 260-4669
Kristina L. Meson: (202) 260-5736
Ann Codrington: (202) 260-4777

Waste Management Division (HRW-CAN3)
U. S. Environmental Protection Agency
Region I
J. F. Kennedy Federal Buiding
Boston, MA 02203-2211

Robin Biscaia: (617) 573-5754
Austine Frawley: (617) 573-5758

Other Federal Agencies

Research & Special Programs Administration (RSPA)
U. S. Department of Transportation
Mail Stop DHM22
400 7th Street, SW
Washington, DC 20590-0001

George E. Cushmac, PhD: (202) 366-4545
Eileen Martin: (202) 366-4488

Occupational Safety & Health Administration (OSHA)
U. S. Department of Labor
Room N-3718
200 Constitution Avenue, NW
Washington, DC 20210

Kevin Landkrohn: (202) 523-7157

Occupational Safety & Health Administration (OSHA)
U. S. Department of Labor
133 Portland Street
Boston, MA 02114

Ron Ratney: (617) 565-7164, x 130

ATTACHMENT C

State Agencies

Connecticut

Waste Management Bureau
Connecticut Department of Environmental Protection
165 Capitol Avenue
Hartford, CT 06106

Maria Valez: (203) 566-5847
Tom Pregman: (203) 566-5847

Massachusetts

Division of Community Sanitation
Massachusetts Department of Public Health
305 South Street
Jamaica Plain, MA 02130

Howard Wensley, MS, CHO: (617) 727-2660

Division of Solid Waste
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

James Decette: (617) 292-5868

Maine

Bureau of Hazardous Material & Solid Waste Control
Maine Department of Environmental Protection
State House Station #17
Augusta, ME 04333-0017

Scott Austin: (207) 287-2651

New Hampshire

Waste Management Division
New Hampshire Department of Environmental Services
6 Hazen Drive
Concord, NH 03301

Carl Woodbury: (603) 271-2925

ATTACHMENT C

Rhode Island

Office of the Director
Rhode Island Department of Environmental Management
9 Hayes Street
Providence, RI 02908

Roger Greene: (401) 277-2771

Environmental Health/Risk Assessment
Rhode Island Department of Health
3 Capitol Hill
Providence, RI 02908

Diann Miele: (401) 277-3424

Vermont

Hazardous Materials Division
Vermont Agency of Natural Resources
103 South Main Street
Waterbury, VT 05676

Gary Urich: (802) 241-3888

ATTACHMENT D

Mel Cheeks
Waste Regulation Section
(617) 223-5590

Kim E. Schweisberg
Toxic Substances Control Section
(617) 565-3165

Mark Spinale
Municipal Evaluation Section
(617) 565-3554

David Delaney
Ground Water Management Section
(617) 565-3615

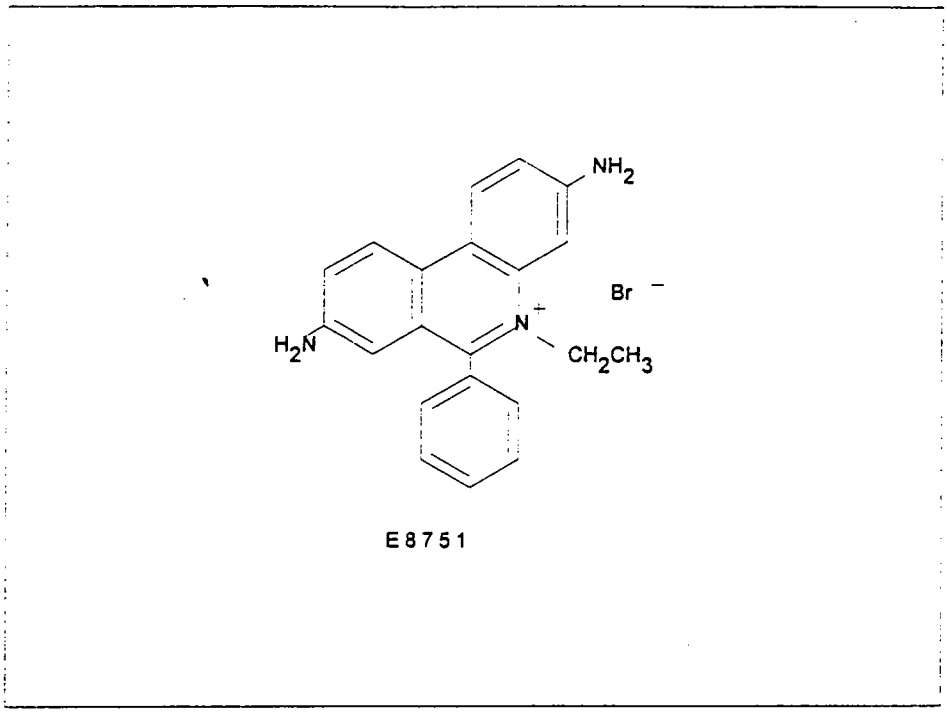
Don Mackie
Emergency Response Section
(617) 860-4396

Dwight Peavy
Toxics and Radiation Section
(617) 565-3230

NR

PRODUCT #: E8751 NAME: ETHIDIUM BROMIDE
MATERIAL SAFETY DATA SHEET, Valid 11/93 - 1/94
Printed Tuesday, May 24, 1994 10:14AM

Sigma Chemical Co.	Aldrich Chemical Co.	Fluka Chemical Corp.
P.O. Box 14508	1001 West St. Paul	980 South Second St.
St. Louis, MO 63178	Milwaukee, WI 53233	Ronkonkoma, NY 11779
Phone: 314-771-5765	Phone: 414-273-3850	Phone: 516-467-3535



E8751

SECTION 1. - - - - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - - - -
PRODUCT #: E8751 NAME: ETHIDIUM BROMIDE
SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - - -
CAS #:1239-45-8
MF: C21H20BR1N3
SYNONYMS
2,7-DIAMINO-10-ETHYL-9-PHENYLPHENANTHRIDINIUM BROMIDE * 3,8-DIAMINO-5-ETHYL-6-PHENYLPHENANTHRIDINIUM BROMIDE * 2,7-DIAMINO-9-PHENYL-10-ETHYLPHENANTHRIDINIUM BROMIDE * 2,7-DIAMINO-9-PHENYLPHENANTHRIDINE ETHOBROMIDE * DROMILAC * ETHIDIUM BROMIDE * HOMIDIUM BROMIDE * RD 1572 *
SECTION 3. - - - - - - - - - - HAZARDS IDENTIFICATION - - - - - - - - -
LABEL PRECAUTIONARY STATEMENTS
TOXIC
MAY CAUSE HERITABLE GENETIC DAMAGE.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE (SHOW THE LABEL WHERE POSSIBLE).
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
DO NOT BREATHE DUST.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE

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PROTECTION.

SECTION 4. - - - - - - - - - - - FIRST-AID MEASURES- - - - - - - - - - -

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. - - - - - - - - - - FIRE FIGHTING MEASURES - - - - - - - - - -

EXTINGUISHING MEDIA

WATER SPRAY.

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - - - -

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.

AVOID RAISING DUST.

VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - - - - - - - HANDLING AND STORAGE- - - - - - - - - - -

REFER TO SECTION 8.

SECTION 8. - - - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - -

CHEMICAL SAFETY GOGGLES.

RUBBER GLOVES.

NIOSH/MSHA-APPROVED RESPIRATOR.

SAFETY SHOWER AND EYE BATH.

USE ONLY IN A CHEMICAL FUME HOOD.

DO NOT BREATHE DUST.

DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

WASH THOROUGHLY AFTER HANDLING.

IRRITANT.

MUTAGEN.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - - -

APPEARANCE AND ODOR

DARK PURPLE TO MAROON POWDER

MELTING POINT: 260 C TO 262 C (DEC)

SECTION 10. - - - - - - - - STABILITY AND REACTIVITY- - - - - - - - -- -

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE
NITROGEN OXIDES
HYDROGEN BROMIDE GAS

SECTION 11. - - - - - - - - - - TOXICOLOGICAL INFORMATION - - - - - - - -

ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
CAUSES EYE AND SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

CHRONIC EFFECTS
MAY ALTER GENETIC MATERIAL.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS NO: SF7950000
PHENANTHRIDINIUM, 3,8-DIAMINO-5-ETHYL-6-PHENYL-, BROMIDE

TOXICITY DATA
SCU-MUS LD50:110 MG/KG ATMPA2 46,285,52

TARGET ORGAN DATA
TUMORIGENIC (ACTIVE AS ANTI-CANCER AGENT)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

SECTION 12. - - - - - - - - - - ECOLOGICAL INFORMATION - - - - - - - - - -
DATA NOT YET AVAILABLE.

SECTION 13. - - - - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - - - -
DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - - - - - - TRANSPORT INFORMATION - - - - - - - - -
CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - - - - - - REGULATORY INFORMATION - - - - - - - - - -

REVIEWS, STANDARDS, AND REGULATIONS
NOHS 1974: HZD A1168; NIS 1; TNF 17; NOS 1; TNE 34
NOES 1983: HZD A1168; NIS 1; TNF 7; NOS 3; TNE 21
EPA GENETOX PROGRAM 1988, POSITIVE: IN VITRO MAMMALIAN NONHUMAN MICRONUCLEUS
EPA GENETOX PROGRAM 1988, POSITIVE: E COLI POLA WITHOUT S9; HISTIDINE REVERSION-AMES TEST
EPA GENETOX PROGRAM 1988, NEGATIVE: CELL TRANSFORM.-SA7/SHE; SPERM MORPHOLOGY-MOUSE
EPA GENETOX PROGRAM 1988, NEGATIVE: S CEREVISIAE GENE CONVERSION; S CEREVISIAE-HOMOZYGOSIS
EPA GENETOX PROGRAM 1988, NEGATIVE: S CEREVISIAE-REVERSION
EPA GENETOX PROGRAM 1988, INCONCLUSIVE: CYTOGENETICS-MALE GERM CELL
EPA GENETOX PROGRAM 1988, POSITIVE: CHO GENE MUTATION

SECTION 16. - - - - - - - - - - OTHER INFORMATION- - - - - - - - - - -

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

Schleicher & Schuell

May 6, 1994

Mel Cheeks
USEPA, Region I
Mail Code HPRCANI
J. F. Kennedy Building
Boston, MA 02203-2211

RE: EPA REGULATIONS FOR ETHIDIUM BROMIDE (Homidium Bromide)

Dear Mr. Cheeks:

A few days ago, we spoke on the telephone about EPA legislation/regulation concerning the disposal of ethidium bromide (EtBr).

EtBr (CAS# 1239-45-8; Merck Index # 4650) is commonly used by scientists in molecular biology research laboratories to stain double-stranded DNA fractionated in agarose electrophoresis gels. When intercalated into DNA, EtBr will fluoresce at 312 nm. It is most commonly used in a 0.5% solution in water or salt solutions. EtBr is a known mutagen as determined by the Ames test. Although some scientists will reuse EtBr-containing buffered solutions, primarily the solution is "decontaminated". The EtBr is disposed of as solid waste, and the buffered solution is disposed of as liquid waste. My interpretation is that EtBr is a mutagenic, toxic solid or liquid, hazardous, discarded chemical waste (40 CRF 261).

Our Company believes there is need to offer an effective and convenient way for scientists to decontaminate EtBr-containing solutions. This would be accomplished by filtering EtBr-containing buffer through an activated carbon filter, thereby concentrating the EtBr on the filter and disposing of the decontaminated solution down the drain.

What we need to know from the USEPA is the following:

1. Is ethidium bromide controlled by the EPA?
2. Is it found on any lists of any sub-division of the EPA; such as: TSCA, SARA, or RCRA? Please supply me with this reference material.
3. What EPA regulations (by Number/Paragraph) govern EtBr?
4. What concentrations are permissible for drain disposal?
5. What distinctions are made for the disposal of EtBr as a solid waste (on a filter), or as a liquid waste (down the drain)?
6. What are the appropriate regulations for disposal as a liquid or as a solid?

Our Company objective is to responsibly communicate the appropriate governmental standards to our customers regarding the proper disposal of EtBr from their laboratories. Please send me any relevant information that will help us communicate this information.

I will be happy to discuss this matter with you in more detail. Please feel free to call me at 603-352-3810 x3290. We are anxious to proceed on this product development project, so we respectfully request that this matter be addressed directly, and that we receive a response within three weeks.

Thank you very much in advance.

Sincerely,
SCHLEICHER & SCHUELL, INC.

Randall H. Morse
Vice President
New Business Development

h:ebh

Schleicher & Schuell, Inc. • 10 Optical Ave. • P.O. Box 2012 • Keene, NH 03431-2012 • Phone: 603-352-3810 • FAX: 603-357-3627

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

June 24, 1994

Mr. Frank DeLorier
Circle D Ranch
RR2 Box 253 Lovers Lane
Charlestown, NH 036003

OFFICE OF THE
REGIONAL ADMINISTRATOR

Re: Municipal Solid Waste Incinerator

Dear Mr. DeLorier:

Thank you for your letter of February 19, 1994, to President Clinton about the Wheelabrator Claremont municipal solid waste incinerator in Claremont, New Hampshire in which you raised concerns about the removal of metals from incinerator ash and requested recent EPA inspection reports for this facility. Your letter has been delegated to the Environental Protection Agency's New England Regional Office (EPA) for a response.

We hope to address your concerns by explaining more fully the federal/state relationship for regulation of facilities of this type. Recent regulatory developments are also summarized that will affect municipal solid waste incinerators in the near future.

Wheelabrator Claremont is currently subject to air permitting requirements of the Clean Air Act as well as solid waste permitting requirements of the Resource Conservation and Recovery Act (RCRA). The New Hampshire Department of Environmental Services (NH DES) has the primary responsibiltiy for implementing both of these programs.

EPA has delegated authority to NH DES to administer and enforce the Clean Air Act through its State Implementation Plan. NH DES issued a permit to Wheelabrator Claremont on April 1, 1992, and inspected the facility on January 21, 1992, and May 12, 1993. The last EPA Clean Air Act inspection of the facility occurred on September 20, 1990. Past performance based on both state and Federal inspections have shown that the facility is in compliance and enforcement actions are not warranted. For further detail, an air compliance status report of the Wheelabrator facility is enclosed.

On May 2, 1994, the Supreme Court issued an opinion interpreting that RCRA does not exempt ash generated at resource recovery facilities burning household and nonhazardous commercial wastes from the hazardous waste requirements of Subtitle C of RCRA. This opinion requires EPA to revise its prior position that both types of ash were exempt from hazardous waste regulation.

Therefore, facilities will now be required to test their ash to determine whether it exceeds regulatory levels defined for "hazardous" wastes. Ash generated from municipal facilities that exhibit characteristics of a hazardous waste will be subject to the hazardous waste requirements set forth in 40 CFR parts 260 to 299.

EPA is now in the process of approving New Hampshire's solid waste program. This state program issues solid waste permits and enforces regulations regarding the inspection and testing of incinerator ash for hazardous constituents. Currently, EPA is developing a strategy with all states for testing, inspecting and, if necessary, taking enforcement actions against incinerators who burn municipal waste.

As the regulatory and enforcement authority for both air and solid waste programs are delegated primarily to the state of New Hampshire, we recommend that you contact the NH DES at the address below for information relating to the most recent inspections for the Claremont facility.

Robert W. Varney, Commissioner
New Hampshire Department of
Environmental Services
6 Hazen Drive
P.O. Box 95
Concord, NH 03301-6509
Tel: (603) 271-3303

I appreciate your concerns and welcome the opportunity to respond to your letter to President Clinton. If you have further questions, please contact Mel Cheeks of the Maine/ New Hampshire/ Vermont RCRA Section at (617) 223-5590 or William Osbahr of the Stationary Source Compliance Section at (617) 565-3264.

Sincerely,

John P. DeVillars
Regional Administrator

Enclosure

cc: Honorable Robert Varney, Commissioner
New Hampshire Department of Environmental Services

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

DATE: June 24, 1994

SUBJ: Executive Summary: Air Compliance Status of Wheelabrator, Claremont New Hampshire facility

FROM: William A. Osbahr, Environmental Engineer
Stationary Source Compliance Section

TO: Files

I. Background

The purpose of this executive summary is to highlight the general air compliance status and enforcement activities surrounding Wheelabrator Claremont (WC) municipal solid waste incinerator. The need for this summary is required to answer an executive correspondence sent to Region 1 regarding WC. The executive correspondence has been referred to the Region since a constituent residing in New Hampshire has written to the office of the President of the United States. The constituent asked for assistance in looking into the compliance/enforcement activities surrounding this facility.

The constituent claims that EPA "has no intention of inspecting this facility and forcing it to function within the scope of the permits issued for its existence." I have performed an in depth review of WC's air compliance history in the EPA database, EPA files, and EPA inspection reports. I have also contacted the New Hampshire Department of Environmental Services (DES) to develop insight as to the source's compliance status regarding state regulations and its permit. After this review, I have determined that this source appears to be operating within compliance with its air permit, the State Implementation Plan (SIP), and the New Source Performance Standards (NSPS). I have also determined that both the DES and the state have monitored the compliance of this facility through annual inspections, quarterly emission reporting, and periodic stack testing.

The constituent has stated a desire to have WC separate metals from its ash as well as clean out metals from its ash landfill. It is important to note that there are no state or federally enforceable air regulations which require the action he has cited. It is my understanding that the Office of External Affairs has circulated this Executive Correspondence to other media in Region 1. Therefore, the issues covered in this summary will only cover applicable air pollution regulations.

II. Description of Facility

TWC is a municipal waste combuster facility which generates 4.5 MW of electricity. The source consist of two mass burn incinerators. Each unit is capable of burning 100 tons/day of trash from 28 different towns and districts. A more complete and technical description can be found in the inspection reports and the permit contained in the Appendix A of this executive summary.

IV. Description of Air Compliance/Enforcement Activities

WC is subject to regular inspections by the DES. In the last four years DES inspected the source on June 30, 1990, June 6, 1991, September 19, 1991, February 2, 1992 and May 5, 1993. All of these inspections showed the source to be in compliance with their permit, the applicable state regulations, and NSPS.

A stack test was required by the state in June 1993 in order to determine WC's compliance with the DES's Ambient Air limits. The test results and subsequent modelling showed the source to be in compliance with Ambient Air Levels.

EPA inspected this facility on September 20, 1990 by Engineer Donald Dahl. From his inspection and subsequent analysis he found the facility to be in compliance with its applicable air pollution requirements.

On June 10, 1994, I contacted DES regarding any potential non-compliance issues at the source. Jack Glenn, coordinator of enforcement, explained that DES pays close attention to this facility and its operations. He explained that the plant is operated in an efficient manner and plant personnel play close attention to compliance issues. DES has plans to inspect this facility early in the summer but at this time they do not have an exact.

Clearly it can be seen that there has been, and will continue to be, a substantial amount of air compliance/enforcement activities regarding this facility. Since reviewing this facility's compliance status, I have compiled the following documents contained in Appendix A:

WC's State issued Permit to Operate

EPA's December 17, 1990, Inspection Report

DES's January 21, and February 18, 1992, Inspection Report

DES's May 12, and May 17, 1993, Inspection Report

DES's March 4, 1994, Ambient Air Impact Analysis Modelling

V. Summary

This source undergoes an adequate amount of scrutiny from both EPA and DES in order to ensure its compliance with applicable air pollution regulations. DES has a grant agreement to maintain its enforcement program within EPA standards. DES administers an effective and efficient air enforcement program in New Hampshire. Its air inspectors are all licensed professional engineers. Past EPA/State program oversights show the high standards which the DES maintains in its diligent enforcement program. I feel that the constituents claims of lack of enforcement against WC do not apply to EPA or DES's air enforcement programs.

File

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

DATE: December 17, 1990

SUBJ: Industrial Survey - Wheelabrator-Claremont, Claremont, New Hampshire

FROM: Donald Dahl, Environmental Engineer DFD
Control Technology and Compliance Section

TO: Files

I. Background Information

Date of Inspection: September 20, 1990

Weather Conditions: 60's partly cloudy

Source Contact: Chuck Conklin; Operations Supervisor
(603) 542-8764

Mailing Address: RFD 2, Box 298
Claremont NH 03743

Location: See attached map

II. Purpose of Inspection

Due to high visibility and potential harm, municipal waste combustors should be inspected on a frequent basis. In FY'90 I targeted both of the large municipal incinerators in New Hampshire for inspections. Wheelabrator Claremont is one of these incinerators.

III. Process Description

Wheelabrator operates two mass burn incinerators which generate 4.5 MW of electricity per hour. Each unit burns approximately 100 tons/day of trash from 28 different towns and districts.

a. Incinerator

Units Nos. 1 and 2 are identical in the practical sense. Each one consists of four zones. Zone No. 2 is usually the combustion zone. Sometimes the burn will take place in zone No. 3 if the moisture content of the trash is high.

The units are fed using front end loaders to keep a 15 foot deep pit filled. Some metals and batteries are removed by workers in the tipping room. However removal of metals and batteries is mainly accomplished at the town's transfer

areas.

After zone 2, the volatile gases are burned in zones 3 and 4. The combustion gases then pass through the superheater, evaporator, and economizer. Unit No. 1 was being retrofitted by adding additional sections to the economizer at the time of inspection.

To control odors combustion air is taken from the tipping floor and a slight (0.10-0.25 in) vacuum is maintained on the boiler.

Fly ash from superheater and evaporator sections is reinfected into the incinerator. Fly ash from economizer and baghouse is mixed with bottom ash and land filled in Newport, New Hampshire.

b. SO_2 control

To control SO_2 and HCL emissions, dry lime is injected counter currently into the exiting gas stream. A venturi is used to increase turbulence; thereby, enhancing the interface of acid gases and lime. New Hampshire has requested that Wheelabrator use 7.1 lbs lime/1000 lbs of steam produced. This amount was derived from initial stack testing. Unlike Concord, Claremont has not experienced lime clogging. The amount of lime is not measured on a continuous basis. A sonar reading is taken once per day to determine the amount used.

c. Particulate Control

To control particulate matter emissions, this facility utilizes a 3 module fabric filter. Each module contains 225 bags. The fabric filter was designed to operate on two modules according to Mr. Conklin. This allows the facility to continue operations when a module is taken off line for repairs. The gas enters module No. 3 first.

A pressure drop of 3-5 inch w.g. across the fabric filter is desired for proper removal. A stack gas temperature around 380 ^{0}F is desirable for heavy metal collection.

Leaks due to bag failure are detected by two methods: 1) increase opacity, 2) cool air on diaphragm. The diaphragms are manually checked once per shift. The bags are inspected for wear during every shutdown. Bag lifetime is around 1.5-2 years.

Bags are cleaned every 400 seconds using pulse air cleaning duration of 20 seconds.

4. <u>Inspection</u>

I arrived at the facility at 12:05. Zero percent opacity was noted.

As previously stated, Unit No. 1 was shutdown for modifications. Unit No. 2 was operating at full load (26,000 lbs/hr of steam). Operating data can be found in Table I. According to literature, this plant was operating within usual design specs (pressure drop of 3-5 inches w.g. across the baghouse, stack temperature of 380 °F, and excess oxygen at 6-10 %.

5. Compliance

The Ard has issued two enforcement actions to Claremont. On May 4, 1989, this facility was cited for operating without a proper CO monitor. The CO monitor had failed relative accuracy tests on 5/28-6/6/87 and 2/15-2/19/88.

On May 17, 1990, unit No. 1 and unit No. 2 were both cited for exceeding CO limits in their permits.

Temporary Permit Nos. TP-C-52 and TP-C-53

On July 15, 1986, the ARD issued two Temporary Permits to SES Claremont for the construction of two MSW incinerators.

The permits contain limits on CO, NOx, SO_2, opacity, TSP, HCL, dioxin, and furan. (See permits in file)

All of the above were tested during stack testing on 5/28 - 6/6/87 and 7/14-7/17/87. Source tested in compliance with all limits.

In addition to the stack testing, Claremont was required to continuously measure CO emissions. During my inspection the CO monitor was registering 15 ppm. This equates to less than 10% of the standard.

Opacity, limited to 20%, was showing 2% on the COM. A VE showed 0%.

NSPS Subpart E

This Subpart has a particulate limit which is less stringent (0.08 gr/dscf compared to 0.02 gr/dscf in its federally-enforceable permit).

6. Conclusion

This facility appears to be well operated and has demonstrated compliance with its permit except for CO emissions during the past winter. Data now shows compliance; however, 1991 winter data will be the indicator if the modifications lowered CO emissions. CO emissions are always higher during the winter due to poorer fuel.

Table I
Operating Data Unit No. 2

Steam Flow (lbs/hr)	26,000
Electricity Generated (MW)	1.6
Excess O_2	8.5
Baghouse delta P (in. w.g.)	
Module 3	4.4
Module 2	4.0
Module 1	4.0
Furnace Temperature (°F)	1800-2000
Steam Pressure (psig)	600
Steam temperature at turbine inlet (°F)	706
CO (ppm)	15
Opacity (% - COM)	2.1
Baghouse Temperature (°F)	386

STATE OF NEW HAMPSHIRE
Department of Environmental Services
Air Resources Division

Permit to Operate

Unit #1 PO-C-362 is Identical

Permit No: PO-C-363
County: Sullivan
Permit Fee: $900

This certifies that:
Wheelabrator Claremont Company, L.P.
has been granted a Permit to Operate for:
Unit #2 Von Roll MSW Incinerator, Grissom Lane, Claremont, NH

a device which emits air pollutants into the ambient air as set forth in equipment registration forms (ARA 1-6), filed with this Division under the date of **February 6, 1986** in accordance with RSA 25-C of the New Hampshire laws of 1979, (amended 1981). This permit is valid until **March 31, 1995**. Permit renewal is subject to Division requirements and must be accompanied by the appropriate permit renewal fee.

This permit is valid provided the device is operated in accordance with all the legally enforceable conditions specified in items 1-5 below:

1. The emissions of air pollutants are limited by the New Hampshire Code of Administrative Rules CHAPTERS Env-A 100-1300.

2. The maximum operating rate is limited to: **See Attached Sheets.**

3. The operating hours of the device are limited to: **24 hours/day, 365 days/yr.**

4. The opacity of emissions may not exceed **20% based on three minute averages.**

5. Other conditions: **See attachment.**

The owner or operator of the device covered by this permit shall notify the Director 30 days prior to any proposed change to the physical structure or operation of the device covered by this permit which increases or decreases the amount of a specific air pollutant emitted by such device or which results in the emission of any additional air pollutant. The change shall not take place until a new permit application is submitted and acted upon by the Director pursuant to Env-A 600.

Any unavoidable malfunction, breakdown, or upset of the device, which results in emissions greater than those stipulated in this permit, must be reported to the Division within 8 working hours of the occurrence.

This permit (or a copy) should be appropriately displayed near the device for which it is issued.

Concord, NH April 1, 1992

Director, Air Resources Division

A. Facility Operation

1. All equipment, facilities, and systems installed as used to achieve compliance with the terms and conditions of this Permit to Operate shall at all times be maintained in good operating order and be operated as efficiently as possible so as to minimize air pollutant emissions.

B. Operating Limitations

1. Maximum charge rate is 9,583 lb/hour of MSW based upon type 2 waste and 4500 BTU/lb at a capacity of 43.1 MMBTU/hour. The MSW can be a mix of types 0, 1, 2, 3 and 6 wastes.

2. Maximum of 8760 hours per year at 8333 lb/hour of type 2 waste as defined above.

3. Steam rate is limited to a maximum of 27,500 lb/hour at 655°F and 605 psig or the maximum rate as established during emission compliance tests.

4. Maximum municipal solid waste throughput is 36,500 tons per year.

5. The incineration shall meet Good Engineering Practice and comply with the Division's "Dioxin Emission Control Policy Guideline for Incinerators and Resource Recovery Facilities" approved April 17, 1986 by the New Hampshire Air Resource Commission.

6. No toxic/hazardous wastes shall be burned that are subject to the Resource Conservation and Recovery Act (RCRA).

7. During bottom or fly ash removal/handling, no fugitive dust is to be allowed and all fires must be burned out or extinguished.

8. The flue gas bypass shall be used for emergency shut down when the following occur.
   a. high temperature flue gas.
   b. high pressure flue gas.

9. Operating limits and parameters shall be established in reference to SES Claremont L.P. correspondence dated June 20, 1986 "Compliance with the HCL Reduction Standard".

10. During incinerator startup the baghouse shall not be bypassed.

11. A surrogate thermocouple shall be located in the incinerator above the combustion zone to provide continuously recorded temperatures.

12. An auxilliary fuel burning system shall be utilized to maintain the temperatures in the combustion zone (Condition B 5).

13. Other operating conditions may be placed at a later date.

C. **Emissions**

1. The particulate emission rate is limited to 0.02 grains per dry standard cubic foot (DSCF) corrected to 12% carbon dioxide.

2. The sulfur dioxide (SO2) emission rate is limited to 26.5 pounds per hour.

3. The nitrogen oxides (NOX) emission rate is limited to 26.5 pounds per hour.

4. The carbon monoxide (CO) emission rate is limited to the following emission limitations:

   a. Twelve (12) pounds per hour which is equivalent to the following stack gas concentration (ppmdv) corrected to 7% oxygen (3 hour rolling average):

Steam Production (lb/hour) (3 hour rolling average)	CO (ppmdv at 7% 02) (3 hour rolling average)
0-18,000	270
19,000	262
20,000	254
21,000	245
22,000	237
23,000	229
24,000	221
25,000	212
26,000	204
26,500	200

C. 4. (continued)

b. One hundred (100) ppmdv corrected to 7% oxygen, 4 day rolling average, as specified in the "Dioxin Emission Control Policy", approved by the N.H. Air Resources Commission, 4/17/86.

c. Four hundred (400) ppmdv corrected to 7% oxygen, 8 hour rolling average as specified in the "Dioxin Emission Control Policy".

5. The hydrogen chloride (HCL) emission rate is limited to 7.5 pounds per hour and the device shall comply with Env-A 1201.07i.

6. The dioxin and furan emission rates are limited to 3.4×10^{-7} TCDD and 4.75×10^{-6} TCDF pounds per hour per unit. These emission rates may change if and when new emission and ambient limits are provided by USEPA or by others and adopted by the Division.

7. The opacity of the emissions shall not exceed 20% based on three minute averages.

D. Air Pollution Control Equipment

Wheelabrator Claremont Co. shall continuously operate and maintain the following air pollution controls to minimize emissions.

1. Each incinerator shall be equipped with a baghouse for the control of particulate matter.

2. Each incinerator shall be equipped with dry lime injection system for the control of HCL and acid gas emissions.

3. Each incinerator shall be equipped with a thermocouple system for the control of dioxin and furan emissions.

E. Malfunction

The Division shall be notified by telephone within 8 working hours following the failure of air pollution control equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable limit stated in Condition C. In addition, the Division shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormaloperation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Condition C and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law of regulations which such malfunction may cause.

F. Emission Tests

Compliance stack testing shall be required by the Division as necessary to ensure that the emission limits set forth in this permit are not exceeded.

1. The Division shall be notified in writing at 30 days prior to emission test to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test.

2. For performance test purposes, sampling ports, platforms and access shall be provided by Wheelabrator Claremont Co. on the incinerator exhaust systems in accordance with 40 CFR 60.8(E).

G. Continuous Emission Monitoring

1. Wheelabrator Claremont Company shall maintain and operate the following continuous monitoring systems in the boiler and/or the exhaust stack:

   A. A continuous emission monitoring/recording (CEM) system to measure stack opacity, O2, CO, and combustion temperatures. The CEM system shall conform to all the requirements in Env-A 802.09. The temperature system shall meet the Division's approval

   B. A hydrogen chloride monitor/recording (CEM) system shall be installed at a later date when the Division determines when an instrument is available and certifiable

G. Continuous Emission Monitoring (continued)

C. NOX and SO2 monitor/recorders (CEM) shall be required if or when it becomes necessary for compliance.

2. Wheelabrator Claremont Company shall maintain a file for all measurements, including continuous monitoring systems performance evaluation; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by Env-A 802.09 and Env-A 802.10 in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurement, maintenance, reports and records.

3. Wheelabrator Claremont Company shall submit a written report of all excess emissions to the Division for every calendar quarter as specified in Env-A 802.09. In addition, lime usage data shall be reported and these data shall include the following:

A. Monthly refuse processed (tons).

B. Steam produced (pounds).

C. Lime used (tons).

D. Pounds of lime used per 1000 pounds of steam produced.

4. Opacity excess emissions shall be defined as any air pollutant for a period or periods aggregating more than three minutes in any one hour which exhibits 20% opacity or greater.

5. For emission limits set forth in Condition C2, C3, C4a, C5 and C6 a gaseous excess emission shall be defined as any three hour period during which the average emissions as measured by the continuous monitoring system exceed the specified limit.

6. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit.

H. Prevention of Significant Deterioration (PSD)

The facility emissions of criteria pollutants shall not exceed 250 tons per year. If the emissions of any criteria pollutant (SO2, NOX, CO, HC and particulates) are greater than 250 ton per year PSD shall apply to the facility

I. Stack Criteria

The minimum stack height will be 150 feet above ground level and the flue diameters shall be no greater than 2.6 feet.

AIR RESOURCES DIVISION

ENGINEERING/FIELD REPORT

FROM	TO	INIT/DATE	COPY
Mary Ann Ruel	Lunderville		
	Davis		
	Bodnarik		
	Wright		

DATE: February 25, 1992

PLANT/FACILITY: Wheelabrator Claremont

LOCATION: Claremont, NH

INSPECTION DATE: January 21, 1992 and February 18, 1992

INSPECTED BY: Mary Ann Ruel

CONTACTS: Jay Berry, Environmental Manager and
Chuck Conklin, Operations Superintendent

I met with Jay Berry and Chuck Conklin to conduct a permit renewal compliance inspection at the Wheelabrator facility in Claremont, NH. Wheelabrator Claremont operates two identical Von Roll Municipal Solid Waste (MSW) Incinerators under PO-C-362 and PO-C-363. These permits expire March 31, 1992.

Each incinerator is rated at 115 tons per day based on Type 2 waste and 4500 BTU per lb at a capacity of 43.1 MMBTU per hour. The MSW can be a mix of Types 0, 1, 2, 3, and 6 wastes. Each incinerator is limited to 100 tons per day. Each incinerator is equipped with a baghouse for control of particulate emissions and a dry lime injection system for control of acid gases.

The inspection began at the tipping floor. No visible evidence of red bag waste, large metal or wood objects, or other non regulated waste was obvious. The storage capacity of the tipping floor is 1000 tons. A 2 day supply of 350-400 tons was on site.

Combustion air is drawn off the tipping floor to create a negative pressure. This process helps to alleviate the odor problems created in the tipping area.

Due to past carbon monoxide problems, combustion air was used to preheat the refuse. The operator by monitoring of the oxygen percentage, CO concentration and visual observation of the refuse determines whether preheat air is necessary. The reason for non-continual operation of the preheat process is due to the use of the steam generated from the refuse incineration. The steam therefore isn't generating power.

The inspection continued through the refuse trail. Unit #2 was down during the time of this inspection due to routine maintenance. Each unit is shut down once per quarter. Propane is used for start up and shut down and complies with condition B.12 of the permit. Unit #1 was fully operational. The refuse was relatively far down in the combustion zone, the reason was explained to be wetness in the trash. When compared to the operational data, this was verified. The operational data for Unit #1 is as follows:

steam rate	27,000	lb/hr	running at maximum, all other components backing down to keep control
boiler draft	-0.23	WC	furnace pressure
Combustion zone temp.	1749	F	based on CO limit
oxygen conc.	7	%	
overfire air pressure	8	inches	
baghouse temp			delta T= 9 F
inlet	393	F	
outlet	384	F	
baghouse pres. drop	4.5	inches	ave

Module	#1	#2	#3
	3"	3.9"	4"

lime feed rate	30 - 40	tons/hr	The lime is blown in counter flow to the air before entering the baghouse by a dry lime injection using a screw/rotary feed.

CEM data for Unit #1 only

steam flow	26,590	lb/hr	
opacity	oxygen		CO ppm
%	%		corrected to 7.02 % oxygen
	3 minute average		
0.84	10.04		7.68
	3 hour average		
	9.77		7.03

opacity %	oxygen %	CO ppm corrected to 7.02
	8 hour average	
	9.68	10.52
	96 hour average	
	8.56	11.08

The CEM is a shared system for Unit #1 and Unit #2. Every 7 1/2 minutes it switches units. This type of system is good for cleaning and avoiding plugging of the lines.

As mentioned earlier, the percent oxygen being high is the result of wet trash. The CO value is also directly reflective of this phenomena.

The lime is blown into the gas stream in a counter current flow prior to the baghouse. The lime system is a dry injection by a screw/rotary feeder. The lime is mixed in with the fly ash and then combines with the bottom ash for removal.

This facility generates 4 1/2 MW of power. The annual amount of refuse incinerated in 1991 was 71,106.09 tons which is equivalent to 8533 hours per year. The annual emissions generated from this refuse are as follows. These values are calculated from past stack test emissions data.

	Unit #1		Unit #2	
	emission rate	tons/ year	emission rate	tons/ year
SO_2	4.15	17.7	5.69	24.3
NO_x	18.4	78.5	14.6	62.3
CO	2.29	9.77	2.01	8.6
HCL	1.47	6.27	2.0	8.5
% efficiency	95.2		94.56	
PM 10	0.943	4.02	0.345	1.5

A second inspection was conducted on February 18, 1992 to determine compliance of Unit #2. The operational data for Unit #2 is as follows:

steam rate	24,300	lb/hr	
boiler draft	-0.31	WC	furnace pressure
Combustion zone temp.	gt 2000	F	out of range
oxygen conc.	10.01	%	same as CEM; was running at 8-9 moments prior
overfire air pressure	6 and 2	inches	
baghouse temp			delta T = 26 F
inlet	397	F	
outlet	371	F	
baghouse pres. drop	5.01	inches	

Module	#1	#2	#3	
	4.4"	8"	5.1"	this could be due to a frozen line, the delta is reasonable

CEM data

steam flow	24,600	lb/hr	
opacity %	oxygen %		CO ppm corrected to 7.02 % oxygen
	3 minute average		
0.72			CO low on Unit #1 out of range
	3 hour average		
	10.5		5.16
	8 hour average		
	10.05		6.04
	96 hour average		
	9.76		9.27

There was a lot of burning in combustion zone 1, the fire was way back. The high temperature and high CO could be reflective of this phenomena. This phenomena could be caused be dry trash being burned and having wet trash added. Wet trash needs to have a longer residence time in zone 1 to dry and burn. The dry trash will burn more quickly and thus move thru faster.

Unit #1 had a lower chamber temperature of 1600 F and an Upper temp of 675 F. When compared to Unit #2, the lower temp was out of range (above 2000 F) and the upper temp was 958 F. Based on this information it doesn't seem unreasonable that the lower temp was out of range.

There was a study conducted on furnace temperature verification in February of 1988. This study will be reviewed to determine the lower chamber temperature of Unit 2. At this time the compliance status of this facility could not be determined.

Due to the permit CO limit being averaged on e 3-hour average, the respective steam rates will be adjusted to a 3-hour average. This condition will be reflected in the permits.

RECOMMENDED ACTION

The permits will be re-issued as is upon receipt of payment. The AFS and NHEIS will be updated. The study of furnace temperature will be found and reviewed.

0055f-14/MAR

DEPARTMENT OF ENVIRONMENTAL SERVICES
AIR RESOURCES DIVISION
Engineering Field Report
June 15, 1993 [October 21, 1993]
Wheelabrator
Claremont, NH

C. Wright	A. Bodnarik	D. Davis	D. Lunderville
CW 10/21/93	CW/ 10/21/93	[illegible]	

I. Background Information :

Date of Inspection ----------5-12-93 and 5-17-93
Type of Inspection ----------Compliance
Inspected by ----------Mary Ruel
Weather ----------Sunny
Source Contact ----------Ted Clark
Opacity ----------< 5%

II. Inspection :

On May 12, 1993, I met with Ted Clark to conduct a routine compliance inspection at Wheelabrator, Claremont. Ted is responsible for both the Wheelabrator Concord and Wheelabrator Claremont facilities. Chuck Conklin, who is plant superintendent of Claremont was unavailable on the day of the inspection. Ted and I inspected the control room and collected the following data.

	unit #1	unit #2
lower	1916 F	2016 F
upper	1254 F	1314 F
baghouse	4.2 psi	4.1 psi
steam	27,000 lbs/hr	27,000 lbs/hr

From the control room, Ted and I inspected the CEM monitor. I obtained a daily print out, instantaneous print out, corrected value print out and a calibration sheet. See attached sheets for the printouts.

From the CEM we inspected the refuse delivery area. The weather outside was sunny and 80 degrees F. Due to the warm weather, the smell of garbage lingered throughout the plant. The refuse delivery area appeared to be very full on both sides of the building.

At first analysis, the plant appears to be in compliance with its current operating conditions. A more thorough review of the data obtained will be conducted at a later time.

WMI
SYSTEMS

SLUDGE DRYER

For all non flammable sludge produced by metal finishing, chemical processing or industrial waste treatment systems.

Introduction

The WMI Sludge Dryer will reduce your operating costs and simplify compliance with the 1984 RCRA Act Amendments. Waste treatment has always stopped at the "Free Standing Solids" stage. Actually a Free Standing Solid is 70% to 80% water. For every ton of "hazardous" waste that you landfilled last year, up to 1600 pounds was pure water. Why pay **"hazardous"** waste disposal cost for water?

System Benefits

- **Cut RCRA disposal costs by 75%**
- **Operates on your available power - gas or electric**
- **Can operate without filter cake dumpsters**
- **State of the art mixers**
- **Sized to take a complete press load**
- **Pays for itself within months**
- **Delivery within 8 weeks of drawing approval**
- **Applications to fit largest or smallest needs**

Why WMI?

The realistic approach to sludge disposal is weight and volume reduction. Sludge disposal is the single most costly expense of your waste water treatment system. If your press produces 25% solids, you are land filling 75% water! WMI produces Sludge Cake Dryers that can reduce your sludge handling costs by 75%. Our units can be skid mounted and installed remote to your existing Waste Treatment System allowing standard waste cake carts to be utilized. A cart full of sludge cake can be dumped into the WMI dryer and then the cart returned to the sludge press. WMI can reduce labor costs and space requirements for sludge handling by installing the Dryer underneath the press.

WATER MANAGEMENT, INCORPORATED

WMI-Ohio
2480 Broadway Ave.
Cleveland, OH 44115
(218) 586-3090

WMI-Arkansas
2300 Hwy. 70 East
Hot Springs, AR 71901
(501) 623-2221

WMI-Georgia
5304 Panola Ind. Blvd.
Decatur, GA 30035
(404) 987-3248

WMI-West
3001 Redhill Ave.
Esplanade I-107
Costa Mesa, CA 92626
(714) 641-2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02203-2211

APR 21 1994

Lawrence C. DiPietro, Sr., President
C.G.A., Inc.
110A Wardtown Road
Freeport, ME 04032

Dear Mr. DiPietro:

This letter is in response to your inquiry dated February 25, 1994. In your letter you state that C.G.A., Inc. recycles spent circuit boards for the metal content, and would like to recycle the left over scrap fiberglass resin boards. You specifically requested a determination of the current recycling status of C.G.A., Inc. In your letter you also indicate a concern over claims made by unknown sources that C.G.A., Inc. does not recycle the scrap fiberglass resin-based circuit boards and is "furthering the processing of industrial byproducts". You requested EPA to provide some type of clarification that the scrap circuit board residuals are a recyclable product.

As a point of clarification, EPA only regulates owners and operators of facilities that store recyclable materials before they are recycled, but does not regulate the actual recycling process [See 40 C.F.R. § 261.6(c)(1)]. In October 2, 1991, EPA published a notice for public comment in the Federal Register (enclosed) on plans to develop recommendations to the Federal Trade Commission (FTC) on voluntary guidance for environmental claims promoting the use of recycled and recyclable materials. The FTC, not EPA, regulates persons that make environmental claims on labeling, advertising and all other forms of marketing. The final guidelines for the Use of Environmental Marketing Claims dated August 13, 1993 are enclosed for your review.

EPA has also contacted the State of Maine's Department of Environmental Protection (ME DEP) about this situation. The ME DEP has informed EPA that it has been actively involved in this matter and is currently trying to determine the status of your proposed recycling facility and the piles of scrap spent circuit board residuals stored on-site. The ME DEP indicated that C.G.A., Inc has submitted documents to the State which contained contradictory information concerning the proposed recycling process. The ME DEP also indicated that this site is in violation of both Maine's solid and hazardous waste regulations. C.G.A. did not make any reference in its February 25, 1994 letter to EPA about this on-going investigation by the ME DEP nor of the possibility of potential solid and hazardous waste violations at the property.

EPA notes, based on information contained in your letter, that C.G.A. has disposed its circuit board residuals on-site in waste piles since 1974 in excess of fifteen thousand (15,000) metric tons. This activity was referred to as "Phase I" of the recycling process. This material is presently stored on the ground and has not been analyzed, to EPA's knowledge, to determine the presence of hazardous constituents or contaminants such as lead and polychlorinated biphenyls (PCBs) that EPA has found in similar types of circuit board wastes [See attached memorandum dated August 26, 1992 Regulatory Status of Printed Circuit Boards].

EPA highly recommends analytical testing of this stockpiled material to facilitate the ME DEP's investigation into this matter. C.G.A. stated in its letter that potential reuses of this material included the manufacturing of swimming pools, etc. We think C.G.A. would agree that the testing of these piles for leachable hazardous constituents or contaminants is a prudent action to take.

As previously stated above, 40 C.F.R. § 261.6(c)(1) states that owner or operators of recyclable materials before they are recycled are subject to Parts 262 and 263 of the federal hazardous waste regulations and the notification requirements under Section 3010 of the Resource Conservation and Recovery Act (RCRA). Subtitle C of RCRA establishes a program to identify those solid wastes which may be hazardous and imposes management standards to protect human health and the environment. If the printed circuit board residuals stored on your property exhibits one of the characteristics of a hazardous waste identified in Part 261, Subparts C or D it must be managed as a hazardous waste prior to recycling.

Ultimately, the completion of ME DEP's investigation into this matter will determine the status of your proposed recycling process and the regulatory status of the circuit board residuals currently stored at your site. The State of Maine's hazardous waste regulations have been determined equivalent to the federal rules by EPA. The State of Maine has received authorization from EPA to implement its regulations in lieu of the federal program.

EPA does not wish to impede the ME DEP's investigation of this matter. Therefore, your continued cooperation with the ME DEP to provide additional information on the proposed recycling process and analysis of the circuit board residuals should expedite this matter to a successful conclusion.

If you have any questions concerning this matter, please contact Ken Rota of the RCRA Support Section at (617) 573-5759.

Sincerely,

Ira Leighton

Ira Leighton, Chief
CT Waste Management Branch

cc: Scott Whittier, Maine DEP

UNITED STATES ENVIRONMENT... OTECTION AGENCY
WASHINGTON, D... 0460

AUG 26 902

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Regulatory Status of Printed Circuit Boards

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

TO: Waste Management Division Directors,
Regions I-X

Printed electronic circuit boards are major components of personal computers in widespread use in the U.S. today. As updated computer equipment becomes available, the older (but still usable) equipment is often placed into surplus, or is reclaimed/reused. The old equipment may be disassembled and the usable parts salvaged. Parts may also be scrapped and processed for metal values due to their obsolescence, even though they are still usable.

After the printed circuit boards themselves are disassembled, recovering usable components, the boards are often shredded or otherwise processed, and/or burned as part of the reclamation process. Later, base metals (lead, copper) or precious metals (e.g., gold, silver, or platinum) can be reclaimed through additional processing.

The International Precious Metals Institute (IPMI) has written to EPA and requested a determination under RCRA Subtitle C for the status of used printed circuit boards. The regulatory status of unused circuit boards (considered commercial chemical products) and by-product wastes from circuit board production are not affected by this memorandum. The Agency is planning to study the area of used printed circuit boards in more depth; however, our interim interpretation is discussed below.

The EPA believes that based upon the way in which used printed circuit boards are originally generated, these materials most clearly meet the definition of spent materials (§ 261.1(c)(1)). However, we have further examined whether these boards can also be classified as scrap metal under § 261.1(c)(6). Scrap metal is defined based in large part on the physical appearance of a secondary material, dependent on the presence of metal, and includes secondary materials that would otherwise be spent materials or by-products.

3 of 5

As a matter of policy, the Agency has decided that unprocessed, spent (i.e., used) printed circuit boards are subject to regulation as scrap metal for the purposes of § 261.6(a)(3)(iv), and are therefore exempt from RCRA Subtitle C regulation when recycled. The Agency has made this determination largely because 1) metals can be recovered from the process of metal parts that are an integral part of these circuit boards, and 2) unprocessed circuit boards are in a physical state similar to the type of recycled materials the Agency intended to be exempted by providing examples in the scrap metal definition (e.g., "metal parts . . . which when worn or superfluous can be recycled"). The physical state of the unprocessed spent circuit boards limits the dispersion of metal constituents during the handling and transport of the spent printed circuit boards similar to the materials defined as scrap metal in the regulatory language. (Note that this determination is limited to spent circuit boards and does not apply to other spent materials.)

After the boards are processed (including shredding, grinding, burning or smelting), the resulting material (e.g., shredded pieces, sweeps/ash, fluff, or baghouse dust) may no longer be similar to the materials that meet the definition of a scrap metal. The Agency believes that certain materials generated from the processing of spent printed circuit boards may be in a physical state which is inherently different from the more "traditional" scrap metal materials, the latter of which includes bars, turnings, rods, sheets, wire, bolts, etc. Spent circuit board processing, particularly those reclamation steps that do not involve simple physical processing, may generate materials in a form which allows the dispersion of hazardous constituents during subsequent handling. Therefore, some of these materials may not meet the definition of, nor the intent of, the scrap metal definition (analogous to the fluff generated by the shredding of scrap automobiles). Thus, at this point, the processed material may no longer be exempt from regulation as scrap metal, and could be subject to regulation as a spent material (e.g. shredded boards derived from spent circuit boards), a by-product (e.g. sweeps/ash), or a sludge (e.g. baghouse dust).

The processor must determine whether the processed material is a solid waste, and if so, whether it exhibits a characteristic of a hazardous waste, and manage the material accordingly (assuming the material no longer meets the definition of scrap metal). If the generator/processor determines that a material meets the regulatory definition of solid waste but believes the processed (i.e., partially reclaimed) material should be classified as a product rather than a solid waste, an application can be made to the Regional Administrator or authorized State regulatory agency for a case-by-case variance under section 260.30(c) of RCRA. In addition, if the processed material is a hazardous waste that contains economically significant amounts of recoverable precious metals then the materials would be subject to reduced regulations

under Part 266, Subpart F.

This determination is limited to circuit boards. For further information about this interpretation, please contact Allen Maples or Ross Elliott of the Regulatory Development Branch at (202) 260-8551.

cc: RCRA Enforcement Branch Chiefs, Regions I-X
NEIC
OWPE
OE
IPMI

federal register

Wednesday
October 2, 1991

49991

Part IV

Environmental Protection Agency

Guidance for the Use of the Terms "Recycled" and "Recyclable" and the Recycling Emblem in Environmental Marketing Claims; Notice of Public Meeting

S-310999

0070(04)(01-OCT-91-12:06:32)

ENVIRONMENTAL PROTECTION AGENCY

[EPA/OSW-FR-91-032; SWH-FRL-4018-3]

Guidance for the Use of the Terms "Recycled" and "Recyclable" and the Recycling Emblem in Environmental Marketing Claims

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of public meeting and request for comments.

SUMMARY: EPA plans to develop recommendations to the Federal Trade Commission on voluntary guidance for environmental claims promoting the use of recycled materials and recyclable materials. The Federal Trade Commission is considering such guidance in response to petitions from States and today's notice solicits comment on a number of options EPA is considering for the guidance. The notice also announces the time and location of a public meeting EPA will hold to hear oral comments from interested parties on the options outlined in this notice.

DATES: Comments on this notice must be received on or before December 31, 1991. The public meeting will be held on Wednesday, November 13, and Thursday, November 14, 1991 from 9:30 am to 4:30 pm at The Rosslyn Westpark Hotel, Arlington, VA. Requests to present oral testimony must be received on or before Monday, October 28, 1991. EPA requests that ten copies of the oral comments be submitted on or before Friday, November 8, 1991.

ADDRESSES: (1) Public Meeting—The Agency will hold a public meeting on Wednesday, November 13, and Thursday, November 14, 1991, to receive comments on the options and issues relating to the options. The meeting will consist of two days of testimony. Because of the limited amount of time available and the desire to hear a range of views, presenters will be grouped in appropriate panels and will be allotted a specified time for statements, which may be followed by questions from the panel. Groups with common perspectives on the questions raised by these options are urged to select a single representative.

Written requests to appear at the meeting should be submitted no later than Monday, October 28, 1991 to: Office of Solid Waste, Public Meeting Request/F-91-GPLP-FFFFF, OS-305, 401 M Street, SW., Washington, DC 20460. The notice of participation should contain the name, affiliation (if applicable), address, and telephone number of the participant and the individual presenter, and a brief statement of the participant's interest in the matter, and the topic of presentation.

If the Agency determines that there will not be adequate time to hear from all those wishing to present comments, the Agency will select among those wishing to testify, in order to ensure that a range of viewpoints and interests is represented. As time allows, individuals may also sign up to present comments during registration time at the hearing.

The public meeting will be held at The Rosslyn Westpark Hotel, 1900 North Fort Myer Drive, Arlington, VA 22209 in the Rosslyn Ballroom.

(2) Written Comments—Written statements and additional information may be submitted at the public hearing for inclusion in the official record. Written comments of any length will be accepted. Commenters must send an original and two copies of their comments to: RCRA Docket Information Center, Office of Solid Waste (OS-305), U.S. Environmental Protection Agency Headquarters, 401 M Street SW., Washington, DC 20460. Comments must include the docket number F-91-GPLP-FFFFF. The public docket is located at EPA Headquarters, room M2427 and is available for viewing from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays. The public must make an appointment to review docket materials. Call (202) 260-9327 for appointments. Copies cost $.15/page.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA/Superfund Hotline, Office of Solid Waste, U.S. Environmental Protection Agency (800) 424-9346 or (703) 920-9810, local in the Washington, DC metropolitan area.

For information on specific aspects of this notice, contact William MacLeod, Office of Solid Waste (OS-301), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 260-4862. 4625 8518 Dina Arnold

SUPPLEMENTARY INFORMATION: Copies of the following documents are available for viewing only in the RCRA Docket room:

The Green Report: Findings and Preliminary Recommendations for Responsible Environmental Advertising, State Attorneys General Task Force.

The Green Report II: Recommendations for Responsible Environmental Advertising, State Attorneys General Task Force.

Recycling Emblem Regulations, State of Rhode Island and Providence Plantations Regulations.

6 NYCRR Part 368 Recycling Emblems, New York State Regulations.

Regional Labeling Standards and Labeling Resolution, the Northeast Recycling Council.

Petition for Federal Trade Commission Guides from National Food Processing Association and other Petitioners.

Petition for Federal Trade Commission Guides from the Cosmetic, Toiletry, and Fragrance Association and the Nonprescription Drug Manufacturers Association.

Open Remarks of F. Henry Habicht II, Deputy Administrator, U.S. Environmental Protection Agency before the Federal Trade Commission, Hearings on Environmental Labeling, July 17, 1991.

Workplan for the Interagency Task Force on Environmental Marketing Claims, U.S. Environmental Protection Agency, Federal Trade Commission, U.S. Office of Consumer Affairs, Description of Labeling Efforts, Draft EPA Report.

Notice Outline

I. Introduction

A. Overview

The American public is increasingly concerned about environmental issues,

* Robin Moran 5866

and individuals are looking for ways to do their part to protect our nation's environment and resources. In the past few years, public understanding of the nature of environmental problems has become more sophisticated. Many people recognize that large environmental problems are created not only by the actions of large companies and organizations, but also by the seemingly small actions of millions of individuals, for example, the generation of municipal solid waste, or the generation of "greenhouse" gases that may contribute to global climate change.

Many individuals are responding by trying to lessen the impacts of their own behavior, by car-pooling to work, conserving water at home, and purchasing consumer products which in some way offer an environmental advantage: Energy-saving lighting fixtures and appliances, products which contain fewer hazardous constituents, or products containing recycled materials. Manufacturers and marketers are responding to the consumer demand for "environmentally oriented" products by attempting to make products which do not contribute to upper atmospheric ozone depletion, create less solid waste or fewer adverse impacts on water quality, etc. They are also advertising and otherwise highlighting both the real, and desired, environmental benefits of these products for consumers.

The Environmental Protection Agency (EPA) views the increased desire for "environmentally oriented" products as an opportunity to find effective non-regulatory solutions to difficult environmental problems which may in some cases be solved more efficiently in the marketplace than through government regulations. Environmentally informed consumers making purchasing decisions based upon accurate and reliable information about the environmental attributes of products would encourage manufacturers to produce goods which have fewer adverse environmental impacts.

To affect a shift toward more environmentally benign products three things must occur: First, manufacturers need to produce products which are better for the environment; second, consumers need to be provided accurate, reliable, and meaningful information concerning the environmental attributes of these products; and, third, consumers need to preferentially purchase these products. We are starting to see manufacturers making products with fewer adverse environmental impacts. In many cases, however, consumers are not being provided reliable and meaningful information about the advantages of these products, partially because of the lack of national consensus on the meaning and use of environmental terms in advertising and labeling. Consumers cannot know how to interpret and use the information they receive until consumers, manufacturers, and government speak a common language. Our failure to speak the same language in environmental marketing is creating problems both for manufacturers who are producing and attempting to market environmentally oriented products, and consumers who are seeking to purchase them.

Some manufacturers who have made legitimate attempts to improve their products by reducing their environmental impacts are unsure how to promote the environmental benefits of their products. They are concerned about criticism and liability for false or misleading advertising if they advertise environmental benefits in the absence of clear and uniform standards or, conversely, they face a potential loss of market share if they do not advertise environmental benefits and their competitors do.

Meanwhile, because manufacturers are making claims based upon differing standards, consumers often do not know what the claims mean, and this creates some consumer confusion and suspicion of environmental claims. Environmental claims are a special class of claims because consumers typically lack the scientific expertise to assess the validity of the claims that marketers are making. The increasing numbers of environmental claims bombarding consumers with information on competing environmental impacts, e.g., "source reduced" or "recyclable" versus "biodegradable," compounds these problems. Also, some highly aggressive marketers may make confusing and even misleading environmental claims, further adding to consumer confusion.

Initial attempts to address this situation have come from State governments; for example, several States, including New York, California, and Rhode Island, have passed legislation or issued regulations which provide standard definitions or guidelines for the use of the terms "recycled" and "recyclable" (and other terms). While individual State action has been part of an important first step to help define and shape the issue, as well as begin the initial consensus building process between government, industry, and consumers, the definitions and guidelines developed at the State government level are not necessarily consistent and compatible with each other. As more States adopt regulations or pass laws to address the issue of environmental marketing, national marketers or distributors may find themselves in a situation where they will either have to target advertising for each State, which could be prohibitively expensive, or will stop advertising the environmental benefits of their products altogether.

Recognizing the limitations of an uncoordinated State-by-State response to the issue, some State organizations have begun to address the issue of environmental marketing at national and regional levels. A task force compromised of the Attorneys General from eleven States has formulated guidance for environmental marketing, which are contained in the Green Report II—Guidance for Responsible Environmental Advertising. This report not only contains guidance for environmental marketing, but also calls upon the Federal government to adopt national standards for environmental marketing claims used in the labeling, packaging, and promotion of consumer products. At the regional level, the Northeast Recycling Council, an organization comprised of State environmental officials from ten Northeastern States, has developed consensus guidelines for the use of the terms "reusable," "recycled content" and "recyclable" in product labeling. These consensus guidelines could be adopted by all ten of the member States in an effort to achieve regional coordination.

If national consensus over the use of these terms is not reached in the near future, we face the danger of losing a valuable tool for educating the public and influencing the production and use of more environmentally oriented products. Consumers may come to distrust or ignore all environmental claims, and national manufacturers and marketers may become so hamstrung by conflicting State standards that they avoid making these claims completely.

B. Federal Role

The U.S. EPA, the U.S. Office of Consumer Affairs (USOCA), and the Federal Trade Commission (FTC) recognize the opportunity presented by environmental marketing for improving the environment as well as the need to avoid misleading or deceptive environmental claims. They also understand the need for Federal involvement to address this issue at the national level. These three agencies have joined to form a Federal Task Force to provide a coordinated and

cohesive national response to the issue of environmental labeling and marketing claims. The members of the Task Force will work together to help ensure that consumer, advertising, and environmental issues are addressed through a coordinated national effort.

The Task Force is intended to enhance and coordinate, rather than supersede, environmental marketing activities currently taking place in each individual agency. Environmental marketing claims may potentially be addressed by one of a combination of several approaches: FTC industry guides, FTC case-by-case enforcement, EPA Guidance for specific terms, and more general guidance, issued by EPA or jointly by the Task Force, that applies to a category of claims. The Task Force will coordinate agency efforts so the appropriate mix of approaches is used to address the commonly used or most problematic claims.

As an initial step to address a key subject in this area, EPA is developing guidance for two terms related to recycling of materials from solid waste: "Recycled" and "recyclable," and for the use of the recycling emblem. This is a topic of much consumer and business interest, and these terms are two of the most frequently used environmental claims.

The FTC held hearings on July 17 and 18, 1991, to gather information to assist them in determining whether they should develop industry guides for the use of environmental marketing claims. If FTC should decide to go forward with developing industry guides in the future, EPA will share the information we are gathering with them, which may serve them in the development of the industry guides. EPA stands ready to assist FTC in any way possible to ensure that the environmental policy needs discussed in this notice are addressed in an effective and coordinated way by the guides. If FTC should decide not to develop industry guides, EPA will publish the recommendations as its guidance to industry and consumers.

C. Purpose of Today's Notice

Today's notice solicits comment on options for guidance to be used by marketers in product labeling and advertising promoting the use of recycled materials and recyclable materials. EPA will hold a public meeting to hear oral comment from interested parties on the options outlined in this notice.

D. Goals and Objectives of EPA Voluntary Environmental Claims Guidance

EPA has two overriding goals in addressing "recycled content" and "recyclable" claims: We want to encourage the trends toward (1) the increased use of recycled materials in products and (2) the increased recovery of materials for recycling. These goals will be advanced by facilitating the communication between consumers and marketers as to which products contain recycled materials content and which products are recyclable. By doing this we will help to restore consumer confidence in environmental marketing claims. (We recognize that improved labeling practices need to be supplemented by strong educational programs to help the general public understand and actively participate in recycling.) We also want to insure that all companies making "recycled content" and "recyclable" claims operate on a level playing field: One company should not be able to gain a market advantage over another company by promoting its product as something the product is not. This will help to ensure that companies making legitimate environmental improvements to their products will benefit from the increased consumer demand for environmentally oriented products, fostering the desire on the part of marketers to provide consumers with more environmentally oriented products.

II. Definitions

The following definitions are used in the notice. These definitions are intended to serve as guidance to marketers and to help educate consumers. In formulating these definitions, EPA has reviewed statutory and regulatory definitions from the Resource Conservation and Recovery Act (RCRA). However, the definitions stated here may not parallel those found in RCRA. For example, whereas the RCRA definition for "post-consumer material" is applicable primarily to paper and paper products, EPA has broadened that definition for purposes of this guidance so that it is applicable in more situations. In choosing the definitions to include in the notice, we have recognized that many of the RCRA definitions apply to government procurement of materials with recycled content, and procurement policy issues might differ from the issues we are addressing in this notice.

The term "home scrap" means those scrap materials, virgin content of a material, or by-products generated from, and commonly reused within, original manufacturing

The term "post-cons means those products generated by a busines that have served their uses, and that have bee or otherwise diverted f waste stream for the pu recycling.

The term "pre-consu means those materials any step in the product and that have been rec otherwise diverted from stream for the purpose does not include those virgin content of a mate products generated from reused within an origin process.

The term "product" m commodities that are cr an end result of, a manu process. For the purpose guidance, packaging is i definition.

The term "recycled ma pre-consumer materials consumer materials, and include home scrap.

The term "recyclables products or materials tha recovered from or otherw from the solid waste stre purpose of recycling.

The term "recycled con the portion of a material' weight that is composed consumer and post-consu

The term "recycle" mea of activities, including col separation, and processin products or other materia recovered from or otherw from the solid waste strea the form of raw materials manufacture of new produ fuel for producing heat or combustion.

The term "recycling rate percentage by weight of a or material category that i

We are soliciting comm the definitions listed in thi accurate and complete for of this guidance, and will, adopted, result in less con manufacturers, marketers, consumers concerning rec and recyclable claims. We soliciting comment on whe should include other terms help manufacturers commu consumers concerning the recycled and recyclable ma

III. Options for Guidance for Recycled Content Claims

The number of Americans served by recycling collection programs has grown rapidly in the past several years. Over 30 million Americans are now served by curbside recycling collection programs, and this number is expected to continue to grow in the coming years. The success of these recycling programs depends upon their ability to collect materials and market these materials. While starting up collection can be the most difficult part of initiating a recycling program, successfully marketing the collected materials will determine the long-term sustainability of the program. For example, some programs that were previously collecting old newspapers stopped when market supply of old newspapers exceeded demand, and prices for the collected materials fell. Many Americans are realizing that collecting materials for recycling is only one element of successful recycling; products containing recycled materials also need to be purchased in order to ensure healthy market demand for materials collected by municipal and other recycling programs. This understanding, as well as a general desire to take positive action for the environment, has helped increase consumer demand for products made with recycled content.

Manufacturers are responding to consumer demand by making more products that use recycled materials, using increasing amounts of recycled materials in products, and developing new ways of utilizing recycled materials in products. Knowing that many consumers are seeking goods with recycled content, marketers are advertising their use of recycled content in more and more products in many different ways. EPA wants the trend towards using greater amounts of recycled materials to continue, and strongly believes that consumer demand for products with recycled content is essential for this to occur. The messages in product advertising concerning recycled content should supply the consumer with useful, accurate, and understandable information. Guidance to manufacturers, marketers, and consumers on such messages can help prevent consumers from becoming cynical and disillusioned about recycled content claims, and can help consumers identify products that use more recycled materials and create incentives for manufacturers to use more recycled materials. This guidance is intended to make "recycled content" claims more consistent and meaningful.

The two major concerns EPA has about "recycled content" claims are first, the types of materials which marketers are claiming as being "recycled," and second, the failure of some marketers to provide useful, accurate, and understandable information to consumers about the amount and sources of recycled material in products. The first problem is due in part to the lack of commonly accepted definitions for terms such as, "post-consumer materials," "recycled materials," etc. In the absence of commonly accepted definitions, some marketers have made dubious claims, for example, claiming that "home scrap" materials are "recycled," when, in fact, such "home scrap" materials are produced and reused within an original manufacturing process and never enter the waste stream.

In order to address this issue, EPA has included in this notice proposed definitions for the terms "recycled materials," "post-consumer materials", "pre-consumer materials," and others. These definitions can be used by marketers in their claims and to help educate consumers. The definitions we are considering are listed in the previous section.

The second potential problem with "recycled content" claims concerns statements that are vague, potentially misleading, and provide little information to consumers. Concerns have been expressed that broad statements on products such as "Made with recycled materials"; "Recycled Content;" or statements that use the "chasing arrows" recycling loop emblem and the term "Recycled," do not provide consumers with sufficient information for the statements to be meaningful. These statements could apply to products containing anywhere from 1% to 100% recycled content. If some consumers care about the use of recycled materials in a product, then it is a likely assumption that these consumers would also be concerned about the amount of recycled content and would generally prefer as much recycled content as feasible. To address these concerns, EPA is examining the following three options for recycled content claims guidance.

A. Option 1: Disclosure of Recycled Materials Content

In order to make statements concerning the use of recycled materials more meaningful, EPA is considering recommending that marketers who advertise the use of recycled materials in a product prominently and clearly state the percentage by weight of recycled materials in the product. For example, an aluminum can manufacturer that uses 50% recyc materials by weight to produce a aluminum can could advertise the recycled materials by making a statement such as "Recycled Alur contains 50% recycled materials." minimum threshold for recycled c would be set or recommended unc option.

This option meets two needs. F the consumer will be provided wi useful and accurate information. E placing the percentage of recycled materials on the product, the cons will be informed of the use of recy materials, and the relative amount recycled materials in the product. Second, this will provide consume with the opportunity to choose pro containing higher amounts of recyc material, thereby potentially creati competitive pressures to increase t amount of recycled materials conte products in order to meet consume demand.

One disadvantage to this option i that it relies heavily upon consume knowledge of and demand for good produced with recycled materials. I consumers do not understand the meaning of the terms used or the recycled content percentage, then th information could have little effect the amount of recycled materials us EPA requests comment on this issue any data concerning consumer understanding of these terms.

B. Option 2: Minimum Content Standards

EPA is also considering a recommendation that marketers shou promote the recycled content of a product or packaging only if the prod or packaging meets a specified minim percentage of recycled content. With this option, EPA would recommend either (1) a generic minimum content standard for all products (e.g., all products should meet a 25% minimum recycled content standard before beir promoted as containing recycled content), or (2) a series of standards specific to materials or product categories (e.g., aluminum beverage containers should meet a 50% standar newsprint should meet a 30% standarc EPA would then recommend that marketers meet these standards before promoting the use of recycled material

This option has several advantages. the standards were commonly adopted it would provide consumers with the knowledge and assurance of a minimu threshold of recycled content when the see content claims. This option could increase the amount of recycled

materials used. If the minimum percentages were set sufficiently high that some manufacturers would need to increase the amount of recycled materials they put in products in order to meet the standards. The option would solve the major disadvantage of Option 1, because it does not rely as heavily on consumer knowledge of and demand for increased amounts of recycled materials use to determine recycled content levels, because these levels will be set by the Administrator.

EPA's Guidelines for Federal Procurement issued under section 6002 of RCRA provide recommended standards for government purchases of goods containing recovered materials. EPA could use these standards as a starting point for setting the standards under this option. (See, for example, 40 CFR part 250.) EPA is requesting comment on whether the "Procurement Guidelines" provide suitable minimum content standards for this guidance.

One disadvantage with this option is that it would not distinguish between products whose recycled content is barely above the standard and those products that are greatly exceeding the standard. Because marketers would not necessarily state the amount of recycled materials content, this option also would not provide consumers with information they could use to choose products with larger amounts of recycled materials content. This option would likely entail high standard setting costs to EPA, as well as the need for ongoing evaluation of the use of recycled materials in products, and periodic revision of the guidance in order to encourage greater use of recycled materials. Also, it is not clear that a commonly accepted, sound basis exists for setting content percentages across many products. Finally, industry could view the standard not only as the minimum level of recycled content, but also as the ceiling, resulting perhaps in less than desired recycled material use. This may occur because industries may have little incentive to go beyond the minimum standard.

C. Option 3: Minimum Content Standards and Disclosure

EPA is also considering recommending a combination of options 1 and 2 which would (1) discourage marketers from promoting the use of recycled materials content unless they meet or exceed a specified minimum content standard, and (2) state the percentage by weight of recycled materials in the product.

The advantage of this option is that consumers would be provided information concerning the percentage of recycled materials used in a product, which would allow them to choose products with higher percentages of recycled material content, and they would be ensured a minimum threshold of recycled content. However, this option would have disadvantages similar to the previous option in regard to costs, the burden of ongoing evaluation, and the difficulty in establishing optimum minimum recycled content standards.

D. EPA's Preferred Option

EPA's preferred option for the use of "recycled content" claims is Option 1: Disclosure of Recycled Materials Content, whereby a marketer would prominently disclose the percentage recycled materials content as part of any "recycled content" claim.

Unlike the other two options which require EPA to establish standards, this option would offer low costs to government, would avoid the need for EPA to oversee development and implementation of minimum content standards, and would not set standards that could be viewed as a ceiling by industry or be considered as arbitrary by observers.

Marketers following this guidance would provide consumers with information on the percentage of recycled content in their products. Consumers can use this information as part of their purchasing decision, potentially creating competition among manufacturers to meet consumer demand for recycled content. EPA believes that many marketers could respond quickly to consumer demand, rapidly increasing their use of recycled materials.

E. General Issues Relating to "Recycled Content" Claims

In this section we will present two important issues which cut across all three of the options for guidance that EPA is considering. EPA is seeking comment on both of these critical issues. The first issue relates to the definitions of "recycled materials" and "recycled content." In the proposed definitions we have defined "recycled materials" as including both pre- and post-consumer materials. This approach was taken for three reasons. First, it is not clear whether consumers understand the difference between pre- and post-consumer materials. The broader, more inclusive definition may be simpler and thus more effective. Second, some pre-consumer wastes which are currently being disposed can be recovered. Efforts to recycle such materials through consumer marketing can help alleviate local disposal problems. Third, it is not clear whether the distinction between pre- and post-consumer waste can be tracked efficiently by producers and brokers handling a variety of waste streams.

Other parties, however, have made the case that encouraging use of post-consumer materials is desirable, because post-consumer materials are relatively more difficult to collect, separate, and process than pre-consumer materials have been traditionally recycled more commonly. For these reasons, they argue that the recycling of post-consumer materials should be encouraged more aggressively than the recycling of pre-consumer materials, or, at the very least, the percentage of post-consumer material content should be specifically stated when communicating the use of recycled materials. Some examples of this position are the State of California's law which requires the use of 10% post-consumer material content before a claim of recycled content can be made, the recommendation of the ad-hoc Committee on Environmental Advertising of the National Association of Attorneys General that marketers not call pre-consumer materials "recycled," and the Northeast Recycling Council's recommendation that marketers separately label the percentages of pre- and post-consumer materials along with any recycled content claim.

EPA would like to receive comment on whether defining "recycled content" to include both pre-consumer and post-consumer materials, or to include only post-consumer materials, will best promote increased consumer understanding regarding this issue. EPA would like to receive comment on whether a recommendation to state pre- and/or post-consumer materials content will lead to increased amounts of materials diverted from incinerators and landfills. Does information exist that demonstrates the effects on solid waste disposal of substituting post-consumer materials for pre-consumer materials? Will a preference for post-consumer materials result in the substitution of post-consumer materials for pre-consumer materials and not lead to a reduction in the total amount of materials destined for disposal? EPA also solicits comments on the feasibility and costs of differentiating and monitoring post-consumer materials content in various manufacturing processes.

The other issue for which EPA is seeking comment concerns the calculation of recycled content, another important issue which cuts across all three options. Several approaches to

calculating recycled content could be used, the difference between the approaches largely having to do with the amount of time over which the recycled materials use is counted. EPA's Procurement Guidelines for paper and paper products are very prescriptive in this regard, requiring that manufacturers meet the standards on a batch-by-batch basis, while EPA's Procurement Guideline for insulation products bases the calculation upon a monthly mass balance of recycled to virgin materials used. The State of New York calculates the percentage of recycled materials as being "that proportion of a package or product weight that is composed of recycled materials as demonstrated by an annual mass balance of all feedstocks and outputs of the manufacturing process." EPA is seeking comment as to what type of accounting system is most appropriate for consumer products claiming the use of recycled materials. Should we be recommending a batch-by-batch, monthly, or annual accounting? Are there other accounting issues that we should be considering?

IV. Options and Guidance for Recyclable Marketing Claims

As more and more Americans participate in recycling programs, the recyclability of products which they purchase is increasingly important. Many Americans want to participate in recycling programs and do their part to help reduce the amount of waste sent to landfills and waste combusters. In order to participate they need to know which materials are collected locally and how these materials need to be prepared for collection.

The most reliable source of information on what materials are collected locally is the local public or private organization sponsoring the program. These organizations, however, often do not have funds sufficient to allow them to mount a comprehensive public education campaign. As a result, consumers often look for information wherever they can find it, and some are looking to product labeling and advertising to learn whether a product can be recycled.

Unfortunately for consumers, recyclability claims are seldom of much assistance in helping them recycle in their own communities, because these claims are not typically based on community availability of recycling programs. Observers have noted that for many consumers, recyclability is determined by the availability of collection programs for the product in their community; however, marketers commonly make "recyclable" claims in order to inform the consumer that the product, if collected, can technically be processed and used, without regard to whether an individual has reasonable access to programs that actually collect the product for use. Because of the mismatch between many consumers' understanding of "recyclable" claims and some marketers' use of "recyclable" claims, we face a situation where some consumers are losing confidence in the validity of "recyclable" claims and in environmental marketing claims in general.

Guidance can help marketers better communicate the recyclability of products to consumers, and can help avoid a loss of consumer confidence in the validity of "recyclable" claims. We believe that communication will be most facilitated by guidance that helps to qualify "recyclable" claims, so that such claims reflect the availability of collection and use programs for the product, and provide information that the consumer can use to recycle the product.

Guidance can also address the problem created by marketers making "recyclable" claims for products which are recycled at very low rates, creating a situation where companies that make commonly "recyclable" products compete with companies that do not do so. EPA supports the efforts of companies which have taken concrete and productive steps to improve the recyclability of their products by using materials that are commonly collected for recycling, eliminating materials incompatible with recycling processes, and supporting the development of recycling infrastructure. We would like to see companies who have made changes or who have supported recycling reap the benefits of their efforts through increased sales and profits in the marketplace. Ideally, guidance would facilitate fair competition between marketers that would increase the use of readily "recyclable" products.

The following sections outline the approaches EPA is considering in formulating guidance for the use of "recyclable" claims.

A. Option 1: Minimum Recycling Rate and Recycling Rate Disclosure

This option has two elements. EPA would recommend that marketers promote the recyclability of a product only when (1) the product is recycled at a minimum percentage nationally, and (2) the product prominently discloses the national recovery rate for the material or product.

The minimum recycling percentage rate would be set by the Administrator. The minimum recycling percentage rate could be set either at a high level to aggressively promote recycling or at a lower level to provide a minimum threshold to prevent trivial recyclable claims by marketers of products that are not widely recycled. The minimum recycling percentage rate could either be set on a material-by-material basis (e.g., aluminum should meet a 30% standard) or a product-by-product basis (aluminum cans should meet a 50% standard). EPA is requesting comment on the most appropriate method for setting minimum recycling percentage rates. We are also requesting comment on criteria appropriate for setting a minimum recycling percentage rate.

For products that meet the minimum percentage, the recycling rate would be disclosed in product labeling and advertising in a statement along with the recyclable claim. For example, the statement could read: "Recyclable. Glass containers are recycled at a 20% rate nationally." EPA would like commenters to provide information concerning the availability of reliable, current national recycling rates for recycled materials and the feasibility of using this information on product labeling and advertising in a timely manner. Also, what role should EPA or others play in overseeing the determination and use of such rates?

This option would help to meet EPA's objectives of improving communications concerning environmental marketing claims. The option helps to ensure that marketers do not make misleading "recyclable" claims, by establishing a minimum threshold before such a claim could be made. It would also provide consumers with comparative information on national recycling rates which could be used as a basis for choosing products, and help foster competition between marketers to increase the use of highly recycled materials in products.

EPA acknowledges that unless the recycling rate threshold was set at a very high level, this option would not discourage marketers from labeling or advertising their products as recyclable in some communities where the product or material is not collected. Another drawback to this option, similar to that described in the "recycled" options, would be the difficulty in establishing a commonly accepted, sound basis for determining the appropriate recycling rate standard for any given material, and the high cost to the Agency of setting the standard.

B. Option 2: Qualified Claims

"Recyclable" claims are often made based upon differing definitions of

recycling. "Recycle" as EPA would define it in section II of this notice, means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from or otherwise diverted from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion. Therefore, in order for a material to be considered fully "recyclable," it must be collected, separated, processed and used. If marketers were to link "recyclable" claims with information on access to collection and use programs, the linkage could eliminate much of the confusion relating to recyclability claims.

With this option, EPA would recommend that marketers make "recyclability" claims: (1) That do not lead consumers to assume that the product is recyclable everywhere; and (2) that provide consumers with information that helps them recycle the material. "Recyclable" claims meeting these criteria are claims that EPA considers to be "qualified."

An example of a qualified claim could be: "This bottle can be recycled in communities where collection facilities for colored HDPE bottles exist. For more information contact your local recycling coordinator." Examples of qualified claims currently exist in the marketplace. For example, a label on a plastic bottle claims: "This bottle is made with PETE. It is the same plastic used to make soft drink bottles and is the most commonly recycled plastic. If your community has a recycling program that collects all products with a [SPI code 1] symbol, please recycle this container. To get more information on how to encourage plastic recycling, write us at the following address:[Address]." Qualified claims help marketers communicate with consumers in a manner that would lead consumers interested in recycling products to take constructive steps to do so. The qualified claims could also avoid the current situation where "recyclable" claims often seem to have little meaning to many consumers because the claims appear to be nothing more than hollow advertising.

Use of qualified claims under this option would not, however, limit the claims to those marketers whose products are recycled at high rates. These claims, therefore, could be used by marketers of products that are recycled at very low rates and in a limited number of locations in the country. We see this as the major drawback to this option.

EPA is seeking comment on a number of issues related to this option. First of all, are the criteria we have set for a "qualified" claim appropriate and sufficient to provide useful information to consumers? What additional criteria, if any, should EPA include? Second, would use of these criteria reduce the number of misleading claims? Would they encourage recovery of recyclable materials?

C. Option 3: Qualified Claims and Disclosure of National Recycling Rate

This option would consist of two recommendations: marketers would make "qualified" claims, as described in Option 2, and also prominently disclose the national recycling rate of the product or material for which the claim of recyclability is being made. For example, a glass bottle could make the claim: "The bottle recycled in communities where collection facilities for colored glass bottles exist. For more information contact your local recycling coordinator. Glass bottles are recycled at a 20% rate nationally."

This option has all of the advantages of the previous option. The additional disclosure of the national recycling rate is designed to address the major concern we have with the previous option: Differentiating the claims of products commonly recycled from the claims of products that are not commonly recycled. While any marketer could make a qualified claim of recyclability under this option, it will encourage marketers who are considering making claims for a product that is minimally recycled to think twice about whether they want to make a claim that reveals how little of their product is actually recycled.

Aside from the issues related to the "qualified" claims and the disclosure of national recycling rate that we discussed in the previous options, EPA is seeking comment on whether a combination of these two options is appropriate and would accomplish EPA's objectives of helping marketers communicate the recyclability of products to consumers, avoiding a loss of consumer confidence in the validity of "recyclable" claims, and assisting companies who have made changes or who have supported recycling reap the benefits of their efforts through increased sales and profits in the marketplace.

D. Option 4: Minimum Recycling Rate, Qualified Claims, and Disclosure of National Recycling Rate

This option is a combination of major elements of Options 1 and 3: First, EPA would establish a minimum recycling rate as described in Option 1. This minimum would be a relatively low level. Marketers would be encouraged not to make claims of recyclability for any products that did not meet this minimal level of recycling. Second, marketers whose products meet this recycling rate would be encouraged to meet the conditions outlined in Option 3.

This option would have the advantages of the previous option plus it would set a minimum threshold that would prevent the most trivial claims of recyclability from being made.

One disadvantage to this option is the difficulty that EPA could have in defining meaningful criteria to set a minimum recycling rate. We are requesting comment on the appropriate criteria for determining a minimum recycling rate in the context of this option. We are also requesting comment on this option in general, and in particular whether the use of several elements in the claim could be confusing to consumers or difficult for marketers to apply.

E. EPA's Preferred Option

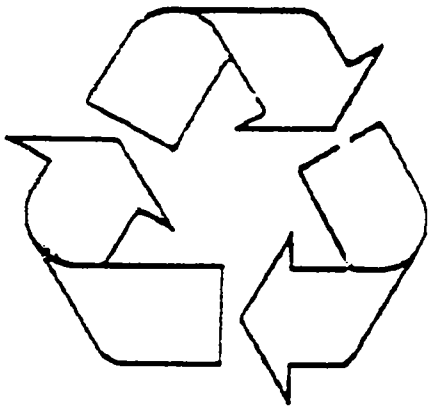
EPA's preferred option is Option 3: Qualified Claims and Disclosure of National Recycling Rate. We believe this option offers the best match between ease of implementation and meeting our objectives of improving communications of "recyclability," avoiding a loss of consumer confidence in the validity of "recyclable" claims, and assisting companies who have made changes or who have supported recycling reap the benefits of their efforts through increased sales and profits in the marketplace.

V. General Guidance

A. Use of Recycling Emblem

The familiar recycling emblem (See Figure 1) was developed in 1970 in a national contest conducted by a paper products manufacturer. After the contest the recycling emblem was placed in the public domain and is now commonly used by marketers to represent both recyclability and recycled content use. It is recognized by much of the public as relating generally to recycling. An immediately recognizable symbol like the recycling emblem can be a useful tool in drawing the attention of consumers to a product that contains recycled content or that is recyclable; however, more guidance on its proper use is needed in order to increase the effectiveness of its use and to ensure that consumers understand its meaning.

Figure 1: Recycling Emblem



The issue of when and how the recycling emblem should be used is being addressed by some Stat recommending that the emblem be used with recycled content and recyclable claims but the emblem be clearly identified to reflect whether it represents recycled content or recyclability. It is likely that more States will attempt to address this issue in the future. In order to provide a consistent national approach to the use of the recycling emblem, EPA is offering the following options for developing guidance. These options are offered as adjuncts to the guidance that EPA will develop for "recycled content" and "recyclable" claims. That is, EPA believes that the approach ultimately recommended for use of the recycling emblem should be used in conjunction with approaches ultimately recommended for the terms "recycled" and "recyclable," so that the emblem and surrounding message are viewed as a consistent claim providing necessary information.

1. Option 1: Limit Use of Recycling Emblem to Certain Recycling Claims

The use of the recycling emblem has expanded to environmental claims unrelated to the use of recycled content or recyclable materials. For example, some marketers have placed the recycling emblem on a package claiming "Environmentally friendly product and packaging," giving one the impression that the recycling emblem also signifies an overall "environmental goodness." While this practice is not yet widespread, we would not like to see it spread as it would dilute the meaning of the emblem. EPA is seeking comment on this position. Do commenters think that this emblem should be used for other uses than signifying the use of recycled materials or recyclability?

Under this option, EPA would recommend that the use of the recycling emblem in product claims and advertising be restricted to claims involving the use of recycled content and recyclability. This option would limit the number of different messages that the recycling emblem would communicate to consumers, avoiding a situation where the emblem could be used for so many different environmental messages as to become virtually meaningless.

The recycling emblem is not used exclusively for environmental claims. For example, community recycling programs will often use the recycling emblem in brochures and advertising notifying the public of the time and location of recycling collection programs. Recycling collection companies use the recycling emblem on the sides of collection trucks. These uses of the recycling emblem are entirely appropriate, and we do not intend for the guidance to cover them.

Another use of the recycling emblem, albeit in a slightly modified form, is the Society of the Plastic Industry's rigid container plastic resin coding system. This coding system is meant to help differentiate between different resin types and encourage the recycling of plastic containers. Some form of the resin coding system is required by law ion over 30 States. EPA does not intend that its guidance cover the use of the resin coding system, as long as the use of the coding is consistent with that of identification of resin and not an environmental claim. For example, a plastic bottle labeled with the code on the bottom of the bottle would not be covered under the guidance, but a plastic cup with the emblem displayed prominently on the side would be considered to be making an environmental claim, and the use of the emblem in that circumstance should be in accordance with EPA guidance.

EPA is seeking comment on whether other legitimate uses besides communicating "recycled content" and "recyclability" and those discussed above exist for the recycling emblem, what those uses are, and whether this option should be expanded to include those uses.

2. Option 2: Use American Paper Institute Guidance

The American Paper Institute (API) distributes camera ready copy of the recycling emblem with the recommendation that manufacturers use a version of the symbol consisting of solid arrows within a black circle to represent the use of recycled content (See Figure 2) and another version with the symbol appearing in outline form to signify recyclability. (See Figure 3.) With this option, EPA would recommend that marketers follow the API guidance and continue to use the two different versions of the recycling emblem.

Figure 2: API Recycled Content Emblem

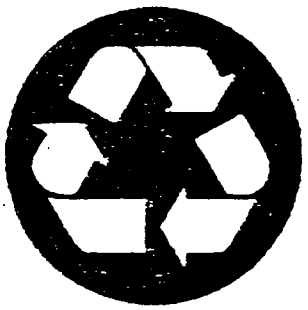
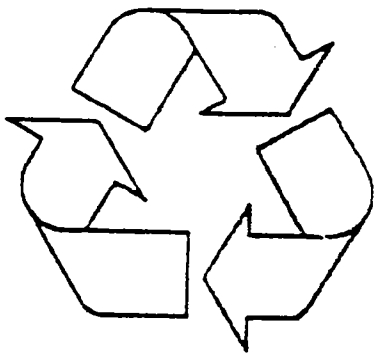


Figure 3: API Recyclable Emblem



An advantage to adopting this option is that the guidance has been developed and used for a number of years, and we would be promoting consistency by not changing guidance and adding to the confusion. We must note, however, because the API guidance promotes the use of two nearly identical emblems that the guidance might not offer a solution to increasing consumer understanding of the recycling emblem. Consumers might not be readily able to recognize that one version of the emblem represents the use of recycled materials while the other represents recyclability.

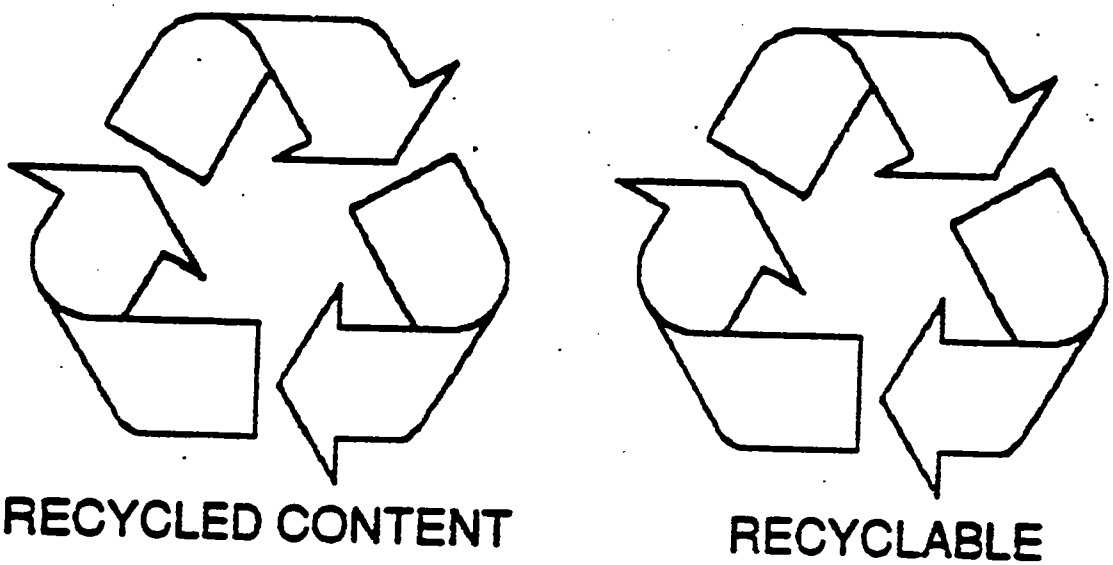
EPA is soliciting comment on whether adopting the API guidance would

resolve the problems of consumer understanding of the meaning of the recycling emblem. EPA is also soliciting information that marketers might have concerning consumer understanding of the recycling emblem as currently used.

3. Option 3: Clearly Label the Recycling Emblem

Under this option, EPA would recommend that marketers clearly label the emblem with "recycled content" or "recyclable," depending on the claim they are making. An example of this can be seen in Figure 4. This option is an attempt to address the concerns we discussed in the previous section concerning the ability of consumers to differentiate between the two different API emblems.

Figure 4: Clearly Labeled Recycling Emblems



EPA is soliciting comment on whether, in fact, this option would solve the problem of consumer differentiation of the two different claims. We are also seeking copies of guidance that organizations have developed to address this issue.

4. EPA's Preferred Options for the Use of the Recycling Emblem

EPA's currently preferred options for the use of the recycling emblem are a combination of Options 1 and 3. Our preference would be that marketers use the recycling emblem only for "recycled content" or "recyclable" claims, and that they clearly label the emblem as pertaining to "recycled content" or "recyclable" claims.

This option will help to promote consumer understanding of the meaning of the recycling emblem by encouraging that the use of the recycling emblem be limited to recycling claims, and by helping to eliminate the confusion that consumers are facing in determining the difference between the "recycled content" and "recyclable" emblems.

B. Separating Claims of Packaging and Product

The labeling and advertising practices of some marketers do not always differentiate between claims made about the packaging and the product contained within the package. Because of this, consumers are not able to tell when recycled content claims refer to the packaging and when they refer to the product. EPA is considering recommending that marketers clearly differentiate between recycled content and the recyclability claims made about the product and the packaging in order to help reduce consumer confusion. We request comment on this issue as well.

Dated: September 22, 1991.

Don R. Clay,

Assistant Administrator, Office of Solid Waste and Emergency Response.

[FR Doc. 91-23709 Filed 10-1-91; 8:45 am]

BILLING CODE 6560-50-M

REVISIONS TO MINIMUM ENROUTE IFR ALTITUDES & CHANGEOVER POINTS—AMENDMENT 371 EFFECTIVE DATE, AUGUST 20, 1992—Continued

From	To	MEA
§ 95.6330 VOR Federal Airway 330 is Amended to Read in Part		
Cody, ID FIX	*Jackson, WY VOR/DME	14000
*13100—MCA Jackson VOR/DME, W BND		
Dunoir, WY VOR/DME	*Rowey, WY FIX	**14000
*11000—MCA Rowey FIX, W BND		
**13500—MOCA		
§ 95.6332 VOR Federal Airway 332 is Amended to Read in Part		
Houston, ME VOR/DME	U.S. Canadian Border	2000
§ 95.6356 VOR Federal Airway 356 is Amended to Read in Part		
San Antonio, TX VORTAC	Guada, TX FIX	*4000
*2500—MOCA		
§ 95.6358 VOR Federal Airway 358 is Amended to Read in Part		
U.S. Mexican Border	Laredo, TX VORTAC	*3000
*2400—MOCA		
§ 95.6407 VOR Federal Airway 407 is Amended to Read in Part		
Jones, TX FIX	Jerry, TX FIX	*4000
*1300—MOCA		
Pittsboro, TX VORTAC	Humble, TX VORTAC	2500
Linen, LA FIX	Shreveport, LA VORTAC	3000

REVISIONS TO MINIMUM ENROUTE IFR ALTITUDES & CHANGEOVER POINTS—AMENDMENT 371 EFFECTIVE DATE, AUGUST 20, 1992—Continued

From	To	MEA
§ 95.6431 VOR Federal Airway 431 is Amended by Adding		
Sisters Island, AK VORTAC	*Tyrie, AK FIX	**5000
*5000—MRA		
**5800—MOCA		
Tyrie, AK FIX	Storks Island, AK VORTAC	5000
§ 95.6437 VOR Federal Airway 437 is Amended to Read in Part		
Jesup, FL FIX	*Story, GA FIX	10000
*5000—MRA		
§ 95.6612 VOR Federal Airway 612 is Amended to Read in Part		
Pocket City, IN VORTAC	*Holan, IN FIX	2500
*2900—MRA		
§ 95.6528 VOR Federal Airway 528 is Amended to Read in Part		
Orrer, OH VORTAC	Chardon, OH VORTAC	3000
Chardon, OH VORTAC	Youngstown, OH VORTAC	3000
§ 95.6550 VOR Federal Airway 550 is Amended to Read in Part		
Cotulla, TX VORTAC	Millet, TX FIX	2500
Comal, TX FIX	*Cecil, TX FIX	**3400
*2500—MRA		
**2600—MOCA		

REVISIONS TO MINIMUM ENROUTE IFR ALTITUDES & CHANGEOVER POINTS—AMENDMENT 371 EFFECTIVE DATE, AUGUST 20, 1992—Continued

From	To	MEA
§ 95.6568 VOR Federal Airway 568 is Amended to Read in Part		
Junction, TX VORTAC	Stonewall, TX VORTAC	*4000
*3300—MOCA		
§ 95.6568 VOR Federal Airway 568 is Amended to Read in Part		
San Antonio, TX VORTAC	Guada, TX FIX	*4000
*2500—MOCA		
Guada, TX FIX	Stonewall, TX VORTAC	*4000
*2200—MOCA		
Stonewall, TX VORTAC	Llano, TX VORTAC	*4000
*3100—MOCA		

From	To	MEA	MAA
§ 95.7207 Jet Route No. 207 is Amended to Delete:			
MIAMI, FL VORTAC	Wahaa, FL FIX	18000	45000
WAHAA, FL FIX	Savannah, GA VORTAC	24000	45000

§ 95.8003 VOR FEDERAL AIRWAYS CHANGEOVER POINTS

Airway Segment		Changeover points	
From	To	Distance	From
V-186 is Amended to Delete:			
Van Nuys, CA VOR/DME	Paradise, CA VORTAC	22	Van Nuys

[FR Doc. 92-19105 Filed 8-12-92; 8:45 am]

BILLING CODE 4910-13-M

FEDERAL TRADE COMMISSION

16 CFR Part 260

Guides for the Use of Environmental Marketing Claims

AGENCY: Federal Trade Commission.

ACTION: Publication of final guides.

SUMMARY: The Federal Trade Commission has adopted guides for the use of environmental claims in marketing and advertising. The guides address the applicability of section 5 of the FTC Act to environmental advertising and labeling claims. Public hearings on these issues were held on July 17–18, 1991, along with a 90-day public comment period. In addition to the guides themselves, the Commission is publishing in this notice a summary of an environmental assessment of the guides, including a finding of no significant impact, concluding that an environmental impact statement is not required under applicable law.

EFFECTIVE DATE: July 28, 1992.

ADDRESSES: Copies of the environmental assessment are available from the Public Reference Branch, room 130, Federal Trade Commission, 6th Street and Pennsylvania Avenue, NW., Washington, DC 20580.

FOR FURTHER INFORMATION CONTACT: Mary Koelbel Engle (Attorney), (202) 326-3151.

SUPPLEMENTARY INFORMATION: On Friday, May 31, 1991, the Federal Trade Commission published in the Federal Register a request for public comment on issues concerning environmental marketing and advertising claims, and a notice that it would hold public hearings. 56 FR 24968, May 31, 1991. Public hearings on these issues were held on July 17–18, 1991, along with a 90-day public comment period. On August 2, 1991, the Commission published in the Federal Register a notice extending the comment period. 56 FR 37028, Aug. 2, 1991. The Commission has now adopted guides for the use of environmental claims in marketing and advertising. The guides address the applicability of section 5 of the FTC Act to environmental advertising and labeling claims. In addition to the guides themselves, the Commission is publishing in this notice a summary of an environmental assessment of the guides, including a finding of no significant impact, concluding that an environmental impact statement is not required under applicable law.

List of Subjects in 16 CFR Part 260

Advertising, Environmental claims, Labeling, and Trade practices.

For the reasons set forth in the preamble, 16 CFR ch. I is amended by adding part 260 to read as follows:

PART 260—GUIDES FOR THE USE OF ENVIRONMENTAL MARKETING CLAIMS

Sec.

Sec.
260.7 Environmental marketing claims.
260.8 Environmental Assessment.

Authority: 15 U.S.C. §§ 41–58.

§ 260.1 Statement of purpose.

These guides represent administrative interpretations of laws administered by the Federal Trade Commission for the guidance of the public in conducting its affairs in conformity with legal requirements. These guides specifically address the application of section 5 of the FTC Act (15 U.S.C. 45) to environmental advertising and marketing practices. They provide the basis for voluntary compliance with such laws by members of industry. Conduct inconsistent with the positions articulated in these guides may result in corrective action by the Commission under section 5 if, after investigation, the Commission has reason to believe that the behavior falls within the scope of conduct declared unlawful by the statute.

§ 260.2 Scope of Guides.

These guides apply to environmental claims included in labeling, advertising, promotional materials and all other forms of marketing, whether asserted directly or by implication, through words, symbols, emblems, logos, depictions, product brand names, or through any other means. The guides apply to any claim about the environmental attributes of a product or package in connection with the sales, offering for sale, or marketing of such product or package for personal, family or household use, or for commercial, institutional or industrial use. Because the guides are not legislative rules under section 18 of the FTC Act, they are not themselves enforceable regulations, nor do they have the force and effect of law. The guides themselves do not preempt regulation of other federal agencies or of state and local bodies governing the use of environmental marketing claims. Compliance with federal, state or local law and regulations concerning such claims, however, will not necessarily preclude Commission law enforcement action under section 5.

§ 260.3 Structure of the guides.

The guides are composed of general principles and specific guidance on the use of environmental claims. These general principles and specific guidance are followed by examples that generally address a single deception concern. A given claim may raise issues that are addressed under more than one example and in more than one section of the guides. In many of the examples, one or more options are presented for qualifying a claim. These options are intended to provide a "safe harbor" for marketers who want certainty about how to make environmental claims. They do not represent the only permissible approaches to qualifying a claim. The examples do not illustrate all possible acceptable claims or disclosures that would be permissible under section 5. In addition, some of the illustrative disclosures may be appropriate for use on labels but not in print or broadcast advertisements and vice versa. In some instances, the guides indicate within the example in what context or contexts a particular type of disclosure should be considered.

§ 260.4 Review procedure.

Three years after the date of adoption of these guides, the Commission will seek public comment on whether and how the guides need to be modified in light of ensuing developments. Parties may petition the Commission to alter or amend these guides in light of substantial new evidence regarding consumer interpretation of a claim or regarding substantiation of a claim. Following review of such a petition, the Commission will take such action as it deems appropriate.

§ 260.5 Interpretation and substantiation of environmental marketing claims.

Section 5 of the FTC Act makes unlawful deceptive acts and practices in or affecting commerce. The Commission's criteria for determining whether an express or implied claim has been made are enunciated in the Commission's Policy Statement on Deception.[1] In addition, any party making an express or implied claim that presents an objective assertion about the environmental attribute of a product or package must, at the time the claim is made, possess and rely upon a reasonable basis substantiating the claim. A reasonable basis consists of competent and reliable evidence. In the context of environmental marketing claims, such substantiation will often require competent and reliable scientific evidence. For any test, analysis, research, study or other evidence to be "competent and reliable" for purposes of these guides, it must be conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results. Further guidance on the reasonable basis standard is set forth in the Commission's 1983 Policy Statement on the Advertising Substantiation Doctrine, 49 FR 30,999 (1984); appended to Thompson Medical Co., 104 F.T.C. 648 (1984). These guides, therefore, attempt to preview Commission policy in a relatively new context—that of environmental claims.

[1] *Cliffdale Associates, Inc.*, 103 F.T.C. 110, at 176, 176 n.7, 183, appendix, reprinting letter dated Oct. 14, 1983, from the Commission to The Honorable John D. Dingell, Chairman, Committee on Energy and Commerce, U.S. House of Representatives (1984) ("Deception Statement").

§ 260.6 General principles.

The following general principles apply to all environmental marketing claims, including, but not limited to, those described in § 260.7. In addition, § 260.7 contains specific guidance applicable to certain environmental marketing claims. Claims should comport with all relevant provisions of these guides, not simply the provision that seems most directly applicable.

(a) *Qualifications and Disclosures.* The Commission traditionally has held that in order to be effective, any qualifications or disclosures such as those described in these guides should be sufficiently clear and prominent to prevent deception. Clarity of language, relative type size and proximity to the claim being qualified, and an absence of contrary claims that could undercut effectiveness, will maximize the likelihood that the qualifications and disclosures are appropriately clear and prominent.

(b) *Distinction Between Benefits of Product and Package.* An environmental marketing claim should be presented in a way that makes clear whether the environmental attribute or benefit being asserted refers to the product, the product's packaging or to a portion or component of the product or packaging. In general, if the environmental attribute or benefit applies to all but minor, incidental components of a product or package, the claim need not be qualified to identify that fact. There may be exceptions to this general principle. For example, if an unqualified "recyclable" claim is made and the presence of the incidental component significantly limits the ability to recycle the product, then the claim would be deceptive.

Example 1: A box of aluminum foil is labeled with the claim "recyclable," without further elaboration. Unless the type of product, surrounding language, or other context of the phrase establishes whether the claim refers to the foil or the box, the claim is deceptive if any part of either the box or the foil, other than minor, incidental components, cannot be recycled.

Example 2: A soft drink bottle is labeled "recycled." The bottle is made entirely from recycled materials, but the bottle cap is not. Because reasonable consumers are likely to consider the bottle cap to be a minor, incidental component of the package, the

claim is not deceptive. Similarly, it would not be deceptive to label a shopping bag "recycled" where the bag is made entirely of recycled material but the easily detachable handle, an incidental component, is not.

(c) *Overstatement of Environmental Attribute.* An environmental marketing claim should not be presented in a manner that overstates the environmental attribute or benefit, expressly or by implication. Marketers should avoid implications of significant environmental benefits if the benefit is in fact negligible.

Example 1: A package is labeled, "50% more recycled content than before." The manufacturer increased the recycled content of its package from 2 percent recycled material to 3 percent recycled material. Although the claim is technically true, it is likely to convey the false impression that the advertiser has increased significantly the use of recycled material.

Example 2: A trash bag is labeled "recyclable" without qualification. Because trash bags will ordinarily not be separated out from other trash at the landfill or incinerator for recycling, they are highly unlikely to be used again for any purpose. Even if the bag is technically capable of being recycled, the claim is deceptive since it asserts an environmental benefit where no significant or meaningful benefit exists.

Example 3: A paper grocery sack is labeled "reusable." The sack can be brought back to the store and reused for carrying groceries but will fall apart after two or three reuses, on average. Because reasonable consumers are unlikely to assume that a paper grocery sack is durable, the unqualified claim does not overstate the environmental benefit conveyed to consumers. The claim is not deceptive and does not need to be qualified to indicate the limited reuse of the sack.

(d) *Comparative Claims.* Environmental marketing claims that include a comparative statement should be presented in a manner that makes the basis for the comparison sufficiently clear to avoid consumer deception. In addition, the advertiser should be able to substantiate the comparison.

Example 1: An advertiser notes that its shampoo bottle contains "20% more recycled content." The claim in its context is ambiguous. Depending on contextual factors, it could be a comparison either to the advertiser's immediately preceding product or to a competitor's product. The advertiser should clarify the claim to make the basis for comparison clear, for example, by saying "20% more recycled content than our previous package." Otherwise, the advertiser should be prepared to substantiate whatever comparison is conveyed to reasonable consumers.

Example 2: An advertiser claims that "our plastic diaper liner has the most recycled content." The advertised diaper does have more recycled content, calculated as a percentage of weight, than any other on the market, although it is still well under 100% recycled. Provided the recycled content and the comparative difference between the product and those of competitors are significant and provided the specific comparison can be substantiated, the claim is not deceptive.

Example 3: An ad claims that the advertiser's packaging creates "less waste than the leading national brand." The advertiser's source reduction was implemented sometime ago and is supported by a calculation comparing the relative solid waste contributions of the two packages. The advertiser should be able to substantiate that the comparison remains accurate.

§ 260.7 Environmental marketing claims.

Guidance about the use of environmental marketing claims is set forth below. Each guide is followed by several examples that illustrate, but do not provide an exhaustive list of, claims that do and do not comport with the guides. In each case, the general principles set forth in § 260.6 should also be followed.[3]

(a) *General Environmental Benefit Claims.* It is deceptive to misrepresent, directly or by implication, that a product or package offers a general environmental benefit. Unqualified general claims of environmental benefit are difficult to interpret, and depending on their context, may convey a wide range of meanings to consumers. In many cases, such claims may convey that the product or package has specific and far-reaching environmental benefits. As explained in the Commission's Ad Substantiation Statement, every express and material, implied claim that the general assertion conveys to reasonable consumers about an objective quality, feature or attribute of a product must be substantiated. Unless this substantiation duty can be met, broad environmental claims should either be avoided or qualified, as necessary, to prevent deception about the specific nature of the environmental benefit being asserted.

Example 1: A brand name like "Eco-Safe" would be deceptive if, in the context of the product so named, it leads consumers to believe that the product has environmental benefits which cannot be substantiated by the manufacturer. The claim would not be deceptive if "Eco-Safe" were followed by clear and prominent qualifying language limiting the safety representation to a particular product attribute for which it could be substantiated, and provided that no other deceptive implications were created by the context.

Example 2: A product wrapper is printed with the claim "Environmentally Friendly." Textual comments on the wrapper explain that the wrapper is "Environmentally Friendly because it was not chlorine bleached, a process that has been shown to create harmful substances." The wrapper was, in fact, not bleached with chlorine. However, the production of the wrapper now creates and releases to the environment significant quantities of other harmful substances. Since consumers are likely to interpret the "Environmentally Friendly" claim in combination with the textual explanation, to mean that no significant harmful substances are currently released to the environment, the "Environmentally Friendly" claim would be deceptive.

Example 3: A pump spray product is labeled "environmentally safe." Most of the product's active ingredients consist of volatile organic compounds (VOCs) that may cause smog by contributing to ground-level ozone formation. The claim is deceptive because, absent further qualification, it is likely to convey to consumers that use of the product will not result in air pollution or other harm to the environment.

(b) *Degradable/Biodegradable/Photodegradable.* It is deceptive to misrepresent, directly or by implication, that a product or package is degradable, biodegradable or photodegradable. An unqualified claim that a product or package is degradable, biodegradable or photodegradable should be substantiated by competent and reliable scientific evidence that the entire product or package will completely break down and return to nature, *i.e.*, decompose into elements found in nature within a reasonably short period of time after customary disposal. Claims of degradability, biodegradability or photodegradability should be qualified to the extent necessary to avoid consumer deception about:

(1) The product or package's ability to degrade in the environment where it is customarily disposed; and

(2) The rate and extent of degradation.

Example 1: A trash bag is marketed as "degradable," which no qualification or other disclosure. The marketer relies on soil burial tests to show that the product will decompose in the presence of water and oxygen. The trash bags are customarily disposed of in incineration facilities or at sanitary landfills that are managed in a way that inhibits degradation by minimizing moisture and oxygen. Degradation will be irrelevant for those trash bags that are incinerated and, for those disposed of in landfills, the marketer does not possess adequate substantiation that the bags will degrade in a reasonably short period of time in a landfill. The claim is therefore deceptive.

Example 2: A commercial agricultural plastic mulch film is advertised as "Photodegradable" and qualified with the phrase, "Will break down into small pieces if left uncovered in sunlight." The claim is supported by competent and reliable scientific evidence that the product will break down in a reasonably short period of time after being exposed to sunlight and into

[3] These guides do not address claims based on a "lifecycle" theory of environmental benefit. Such analyses are still in their infancy and thus the Commission lacks sufficient information on which to base guidance at this time.

sufficiently small pieces to become part of the soil. The qualified claim is not deceptive. Because the claim is qualified to indicate the limited extent of breakdown, the advertiser need not meet the elements for an unqualified photodegradable claim, i.e., that the product will not only break down, but also will decompose into elements found in nature.

Example 3: A soap or shampoo product is advertised as "biodegradeable," with no qualification or other disclosure. The manufacturer has competent and reliable scientific evidence demonstrating that the product, which is customarily disposed of in sewage systems, will break down and decompose into elements found in nature in a short period of time. The claim is not deceptive.

(c) *Compostable.* It is deceptive to misrepresent, directly or by implication, that a product or package is compostable. An unqualified claim that a product or package is compostable should be substantiated by competent and reliable scientific evidence that all the materials in the product or package will break down into, or otherwise become part of, usable compost (e.g., soil-conditioning material, mulch) in a safe and timely manner in an appropriate composting program or facility, or in a home compost pile or device. Claims of compostability should be qualified to the extent necessary to avoid consumer deception. An unqualified claim may be deceptive:

(1) If municipal composting facilities are not available to a substantial majority of consumers or communities where the package is sold;

(2) If the claim misleads consumers about the environmental benefit provided when the product is disposed of in a landfill; or

(3) If consumers misunderstand the claim to mean that the package can be safely composted in their home compost pile or device, when in fact it cannot.

Example 1: A manufacturer indicates that its unbleached coffee filter is compostable. The unqualified claim is not deceptive provided the manufacturer can substantiate that the filter can be converted safely to usable compost in a timely manner in a home compost pile or device, as well as in an appropriate composting program or facility.

Example 2: A lawn and leaf bag is labeled as "Compostable in California Municipal Yard Waste Composting Facilities." The bag contains toxic ingredients that are released into the compost material as the bag breaks down. The claim is deceptive if the presence of these toxic ingredients prevents the compost from being usable.

Example 3: A manufacturer indicates that its paper plate is suitable for home composting. If the manufacturer possesses substantiation for claiming that the paper plate can be converted safely to usable compost in a home compost pile or device, this claim is not deceptive even if no municipal composting facilities exist.

Example 4: A manufacturer makes an unqualified claim that its package is compostable. Although municipal composting facilities exist where the product is sold, the package will not break down into usable compost in a home compost pile or device. To avoid deception, the manufacturer should disclose that the package is not suitable for home composting.

Example 5: A nationally marketed lawn and leaf bag is labeled "compostable." Also printed on the bag is a disclosure that the bag is not designed for use in home compost piles. The bags are in fact composted in municipal yard waste composting programs in many communities around the country, but such programs are not available to a substantial majority of consumers where the bag is sold. The claim is deceptive since reasonable consumers living in areas not served by municipal yard waste programs may understand the reference to mean that composting facilities accepting the bags are available in their area. To avoid deception, the claim should be qualified to indicate the limited availability of such programs, for example, by stating, "Appropriate facilities may not exist in your area." Other examples of adequate qualification of the claim include providing the approximate percentage of communities or the population for which such programs are available.

Example 6: A manufacturer sells a disposable diaper that bears the legend, "This diaper can be composted where municipal solid waste composting facilities exist. There are currently [X number of] municipal solid waste composting facilities across the country." The claim is not deceptive, assuming that composting facilities are available as claimed and the manufacturer can substantiate that the diaper can be converted safely to usable compost in municipal solid waste composting facilities.

Example 7: A manufacturer markets yard waste bags only to consumers residing in particular geographic areas served by county yard waste composting programs. The bags meet specifications for these programs and are labeled, "Compostable Yard Waste Bag for County Composting Programs." The claim is not deceptive. Because the bags are compostable where they are sold, no qualification is required to indicate the limited availability of composting facilities.

(d) *Recyclable.* It is deceptive to misrepresent, directly or by implication, that a product or package is recyclable. A product or package should not be marketed as recyclable unless it can be collected, separated or otherwise recovered from the solid waste stream for use in the form of raw materials in the manufacture or assembly of a new package or product. Unqualified claims of recyclability for a product or package may be made if the entire product or package, excluding minor incidental components, is recyclable. For products or packages that are made of both recyclable and non-recyclable components, the recyclable claim should be adequately qualified to avoid consumer deception about which portions or components [illegible] or package are recyclable. Claims of recyclability should be qualified to the extent necessary to avoid consumer deception about any limited availability of recycling programs and collection sites. If an incidental component significantly limits the ability to recycle the product, the claim would be deceptive. A product or package that is made from recyclable material, but, because of its shape, size or some other attribute, is not accepted in recycling programs for such material, should not be marketed as recyclable.

Example 1: A packaged product is labeled with an unqualified claim, "recyclable." It is unclear from the type of product and other context whether the claim refers to the product or its package. The unqualified claim is likely to convey to reasonable consumers that all of both the product and its packaging that remain after normal use of the product, except for minor, incidental components, can be recycled. Unless each such message can be substantiated, the claim should be qualified to indicate what portions are recyclable.

Example 2: A plastic package is labeled on the bottom with the Society of the Plastics Industry (SPI) code, consisting of a design of arrows in a triangular shape containing a number and abbreviation identifying the component plastic resin. Without more, the use of the SPI symbol (or similar industry codes) on the bottom of the package, or in a similarly inconspicuous location, does not constitute a claim of recyclability.

Example 3: A container can be burned in incinerator facilities to produce heat and power. It cannot, however, be recycled into new products or packaging. Any claim that the container is recyclable would be deceptive.

Example 4: A nationally marketed bottle bears the unqualified statement that it is "recyclable." Collection sites for recycling the material in question are not available to a substantial majority of consumers or communities, although collection sites are established in a significant percentage of communities or available to a significant percentage of the population. The unqualified claim is deceptive since, unless evidence shows otherwise, reasonable consumers living in communities not served by programs may conclude that recycling programs for the material are available in their area. To avoid deception, the claim should be qualified to indicate the limited availability of programs, for example, by stating, "Check to see if recycling facilities exist in your area." Other examples of adequate qualifications of the claim include providing the approximate percentage of communities or the population to whom programs are available.

Example 5: A soda bottle is marketed nationally and labeled, "Recyclable where facilities exist." Recycling programs for material of this type and size are available to a significant percentage of communities or to a significant percentage of the population, but are not available to a substantial majority of

consumers. The claim is deceptive since, unless evidence shows otherwise, reasonable consumers living in communities not served by programs may understand this phrase to mean that programs are available in their area. To avoid deception, the claim should be further qualified to indicate the limited availability of programs, for example, by using any of the approaches set forth in Example 4 above.

Example 6: A plastic detergent bottle is marketed as follows: "Recyclable in the few communities with facilities for colored HDPE bottles." Collection sites for recycling the container have been established in a half-dozen major metropolitan areas. This disclosure illustrates one approach to qualifying a claim adequately to prevent deception about the limited availability of recycling programs where collection facilities are not established in a significant percentage of communities or available to a significant percentage of the population. Other examples of adequate qualification of the claim include providing the number of communities with programs, or the percentage of communities or the population to which programs are available.

Example 7: A label claims that the package "includes some recyclable material." The package is composed of four layers of different materials, bonded together. One of the layers is made from the recyclable material, but the others are not. While programs for recycling this type of material are available to a substantial majority of consumers, only a few of those programs have the capability to separate out the recyclable layer. Even though it is technologically possible to separate the layers, the claim is not adequately qualified to avoid consumer deception. An appropriately qualified claim would be, "includes material recyclable in the few communities that collect multi-layer products." Other examples of adequate qualification of the claim include providing the number of communities with programs, or the percentage of communities or the population to which programs are available.

Example 8: A product is marketed as having a "recyclable" container. The product is distributed and advertised only in Missouri. Collection sites for recycling the container are available to a substantial majority of Missouri residents, but are not yet available nationally. Because programs are generally available where the product is marketed, the unqualified claim does not deceive consumers about the limited availability of recycling programs.

(e) *Recycled Content.* A recycled content claim may be made only for materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer). To the extent the source of recycled content includes pre-consumer material, the manufacturer or advertiser must have substantiation for concluding that the pre-consumer material would otherwise have entered the solid waste stream. In asserting a recycled content claim, distinctions may be made between pre-consumer and post-consumer materials. Where such distinctions are asserted, any express or implied claim about the specific pre-consumer or post-consumer content of a product or package must be substantiated. It is deceptive to misrepresent, directly or by implication, that a product or package is made of recycled material. Unqualified claims of recycled content may be made only if the entire product or package, excluding minor, incidental components, is made from recycled material. For products or packages that are only partially made of recycled material, a recycled claim should be adequately qualified to avoid consumer deception about the amount, by weight, of recycled content in the finished product or package.

Example 1: A manufacturer routinely collects spilled raw material and scraps from trimming finished products. After a minimal amount of reprocessing, the manufacturer combines the spills and scraps with virgin material for use in further production of the same product. A claim that the product contains recycled material is deceptive since the spills and scraps to which the claim refers are normally reused by industry within the original manufacturing process, and would not normally have entered the waste stream.

Example 2: A manufacturer purchases material from a firm that collects discarded material from other manufacturers and resells it. All of the material was diverted from the solid waste stream and is not normally reused by industry within the original manufacturing process. The manufacturer includes the weight of this material in its calculations of the recycled content of its products. A claim of recycled content based on this calculation is not deceptive because, absent the purchase and reuse of this material, it would have entered the waste stream.

Example 3: A greeting card is composed 30% by weight of paper collected from consumers after use of a paper product, and 20% by weight of paper that was generated after completion of the paper-making process, diverted from the solid waste stream, and otherwise would not normally have been reused in the original manufacturing process. The marketer of the card may claim either that the product "contains 50% recycled material," or may identify the specific pre-consumer and/or post-consumer content by stating, for example, that the product "contains 50% total recycled material, 30% of which is post-consumer material."

Example 4: A package with 20% recycled content by weight is labeled as containing "20% recycled paper." Some of the recycled content was composed of material collected from consumers after use of the original product. The rest was composed of overrun newspaper stock never sold to customers. The claim is not deceptive.

Example 5: A product in a multi-component package, such as a paperboard box in a shrink-wrapped plastic cover, indicates that it has recycled packaging. The paperboard box is made entirely of recycled material, but the plastic cover is not. The claim is deceptive since, without qualification, it suggests that both components are recycled. A claim limited to the paperboard box would not be deceptive.

Example 6: A package is made from layers of foil, plastic, and paper laminated together, although the layers are indistinguishable to consumers. The label claims that "one of the three layers of this package is made of recycled plastic." The plastic layer is made entirely of recycled plastic. The claim is not deceptive provided the recycled plastic layer constitutes a significant component of the entire package.

Example 7: A paper product is labeled as containing "100% recycled fiber." The claim is not deceptive if the advertiser can substantiate the conclusion that 100% by weight of the fiber in the finished product is recycled.

Example 8: A frozen dinner is marketed in a package composed of a cardboard box over a plastic tray. The package bears the legend, "Package made from 30% recycled material." Each packaging component amounts to one-half the weight of the total package. The box is 20% recycled content by weight, while the plastic tray is 40% recycled content by weight. The claim is not deceptive, since the average amount of recycled material is 30%.

Example 9: A paper greeting card is labeled as containing 50% by weight recycled content. The seller purchases paper stock from several sources and the amount of recycled material in the stock provided by each source varies. Because the 50% figure is based on the annual weighted average of recycled material purchased from the sources after accounting for fiber loss during the production process, the claim is permissible.

(f) *Source Reduction.* It is deceptive to misrepresent, directly or by implication, that a product or package has been reduced or is lower in weight, volume or toxicity. Source reduction claims should be qualified to the extent necessary to avoid consumer deception about the amount of the source reduction and about the basis for any comparison asserted.

Example 1: An ad claims that solid waste created by disposal of the advertiser's packaging is "now 10% less than our previous package." The claim is not deceptive if the advertiser has substantiation that shows that disposal of the current package contributes 10% less waste by weight or volume to the solid waste stream when compared with the immediately preceding version of the package.

Example 2: An advertiser notes that disposal of its product generates "20% less waste." The claim is ambiguous. Depending on contextual factors, it could be a comparison either to the immediately preceding product or to a competitor's product. The "10% less waste" reference is deceptive unless the seller clarifies which comparison is intended and substantiates that comparison or substantiates both possible interpretations of the claim.

(g) *Refillable.* It is deceptive to misrepresent, directly or by implication, that a package is refillable. An unqualified refillable claim should not be asserted unless a system is provided for:

(1) The collection and return of the package for refill; or

(2) The later refill of the package by consumers with product subsequently sold in another package.

A package should not be marketed with an unqualified refillable claim if it is up to the consumer to find new ways to refill the package.

Example 1: A container is labeled "refillable x times." The manufacturer has the capability to refill returned containers and can show that the container will withstand being refilled at least x times. The manufacturer, however, has established no collection program. The unqualified claim is deceptive because there is no means for collection and return of the container to the manufacturer for refill.

Example 2: A bottle of fabric softener states that it is in a "handy refillable container." The manufacturer also sells a large-sized container that indicates that the consumer is expected to use it to refill the smaller container. The manufacturer sells the large-sized container in the same market areas where it sells the small container. The claim is not deceptive because there is a means for consumers to refill the smaller container from larger containers of the same product.

(h) *Ozone Safe and Ozone Friendly.* It is deceptive to misrepresent, directly or by implication, that a product is safe for or "friendly" to the ozone layer. A claim that a product does not harm the ozone layer is deceptive if the product contains an ozone-depleting substance.

Example 1: A product is labeled "ozone friendly." The claim is deceptive if the product contains any ozone-depleting substance, including those substances listed as Class I or Class II chemicals in title VI of the Clean Air Act Amendments of 1990, Public Law No. 101-549, or others subsequently designated by EPA as ozone-depleting substances. Class I chemicals currently listed in title VI are chlorofluorocarbons (CFCs), halons, carbon tetrachloride and 1,1,1-trichloroethane. Class II chemicals currently listed in title VI are hydrochlorofluorocarbons (HCFCs).

Example 2: The seller of an aerosol product makes an unqualified claim that its product "Contains no CFCs." Although the product does not contain CFCs, it does contain HCFC-22, another ozone depleting ingredient. Because the claim "Contains no CFCs" may imply to reasonable consumers that the product does not harm the ozone layer, the claim is deceptive.

Example 3: A product is labeled "This product is 95% less damaging to the ozone layer than past formulations that contained CFCs." The manufacturer has substituted HCFCs for CFC-12, and can substantiate that this substitution will result in 95% less ozone depletion. The qualified comparative claim is not likely to be deceptive.

§ 260.8 Environmental assessment.

National Environmental Policy Act. In accordance with § 1.83 of the FTC's Procedures and Rules of Practice [8] and § 1501.3 of the Council on Environmental Quality's regulations for implementing the procedural provisions of National Environmental Policy Act, 42 U.S.C. 4321 *et seq.* (1988), [9] the Commission has prepared an environmental assesament for purposes of providing sufficient evidence and analysis to determine whether issuing the Guides for the Use of Environmental Marketing Claims requires preparation of an environmental impact statement or a finding of no significant impact. After careful study, the Commission concludes that issuance of the Guides will not have a significant impact on the environment and that any such impact "would be so uncertain that environmental analysis would be based on speculation." [10] An environmental impact statement is therefore not required. This conclusion is based on the findings in the environmental assessment that issuance of the guides would have no quantifiable environmental impact because the guides are voluntary in nature, do not preempt inconsistent state laws, are based on the FTC's deception policy, and, when used in conjunction with the Commission's policy of case-by-case enforcement, are intended to aid compliance with section 5(a) of the FTC Act as that Act applies to environmental marketing claims. Furthermore, the guides are neither motivated by nor intended to influence environmental policy decisions. The guides also do not impose standards on manufacturing or waste disposal methods. Consumer behavior as a result of the issuance of guides may change but any such change cannot be quantified, or even reasonably estimated, since those decisions would be influenced by many other variables, in addition to advertising claims. Industry response to the guides, beyond modification of environmental marketing claims, is also impossible to predict or quantify. The alternatives to Commission guides described in the environmental assessment, both within and without the Commission, would also have, at most, only an indirect and highly speculative impact on the environment.

[8] 16 CFR 1.83 (revised as of January 1, 1991).

[9] 40 CFR 1501.3 (1991).

[10] 16 CFR 1.83(a).

By direction of the Commission, Commissioner Azcuenaga dissenting.

Donald S. Clark,

Secretary.

DISSENTING STATEMENT OF COMMISSIONER MARY L. AZCUENAGA CONCERNING ISSUANCE OF COMMISSION GUIDES ON ENVIRONMENTAL MARKETING CLAIMS

Today, the Commission issues guides on environmental marketing claims. The guides should prove useful to the business and law enforcement communities and to consumers, that is, to all those who make, analyze or rely on environmental claims in the advertising and marketing of goods and services. In an area that seems always to prove more difficult than initial impressions suggest, the Commission should be commended for producing a clear, careful and balanced document.

It has been my pleasure to work with my colleagues and Commission staff in this important and difficult endeavor and with the government agencies and other concerned groups and individuals who have participated so generously and constructively in this process. With regret, I nevertheless find I must dissent.

Basic to the exercise of the responsibility of my office is the obligation to act within the authority conferred on that office and, as I understand that obligation, it is not satisfied by forecasting that a challenge is unlikely or by deferring to the courts to decide on review whether the exercise lies within the bounds of the authority, but rather is my obligation to decide in the first instance and without regard to the prevailing political climate in which that decision will be received. As I read the law, the Commission has no authority to issue these guides, as written, without first employing the rulemaking procedures of section 18(b)(1) of the FTC Act, which it has not done.

Section 18(a)(1) of the FTC Act, 15 U.S.C. 57a(a)(1), provides that the Commission may prescribe:

(A) interpretative rules and general statements of policy with respect to unfair or deceptive acts or practices * * *, and

(B) rules which define with specificity acts or practices which are unfair or deceptive acts or practices * * *.

Section 18(b)(1) directs that "[w]hen prescribing a rule under subsection (a)(1)(B)," the Commission is to proceed in accordance with the notice and comment requirements of section 553 of the Administrative Procedure Act and shall also follow the more extensive procedures set forth in section 18 that often are referred to as "Magnuson-Moss rulemaking."

As the guides expressly state, the majority of the Commission does not view its guides as having the force and effect of law but as explanations of existing statutory terms and obligations. Under the Administrative Procedure Act, 5 U.S.C. 553, and under section 18 of the FTC Act, therefore, the Commission apparently would categorize its guides as "interpretive" (or "interpretative") rules or policy statements rather than "legislative" rules or "rules which define with specificity

deceptive acts or practices." I cannot agree.

By stating definitively, for example, that a particular act "is deceptive" or that particular conduct "would be deceptive," or that under specified circumstances, firms "must" or "should" act in a particular way, language that appears throughout the document,[1] I believe that the document has "defined with specificity" a deceptive act or practice as set forth in section 18(a)(1)(B). Since the enactment of the Magnuson-Moss Act in 1975, the Commission has been empowered to take such an action only if it first adheres to Magnuson-Moss rulemaking procedures.

If the Commission in issuing its guides were relying on a body of past precedent, I might be persuaded that my colleagues were correct in their assessment, and that the decisive "guidance" in the document simply explicates existing Commission case law and policy. In issuing its Deception Statement in 1983, for example, the Commission reviewed decided cases to synthesize principles, but that is not the case here. The Commission's case law on environmental claims consists almost entirely of consent agreements and orders issued without adjudicative records or admissions of liability. These agreements and orders may convey to the public some sense of what the Commission is likely to do in other similar situations, but they are not binding precedent.

Were I entirely alone in my concern over the need to distinguish between interpretive and legislative rules in issuing some form of guidance on environmental claims, I might be inclined to accede to the position of the majority. Again, this is not the case. Although the courts, particularly in the District of Columbia Circuit, have not instructed agencies unambiguously on how they should distinguish interpretive and legislative rules, recent decisions suggest that my concern is not without validity. At the least, they reflect judicial concern that agencies attend to this question with care in reaching their regulatory decisions and judicial unwillingness blindly to acquiesce in agencies' characterizations of their actions. In short, saying that these are guides and not rules does not make it so.

Even in the presence of express language disavowing agency intent to bind either itself or the public, courts in this circuit have considered whether allegedly interpretive rules are sufficiently mandatory and definitive to render them legislative in nature. See *Community Nutrition Institute* v. *Young*, 818 F.2d 943, 946 (D.C. Cir. 1987) (noting that it is appropriate to "give some, albeit not overwhelming, deference to an agency's characterization of its statement" and refusing to sustain FDA rules because the agency failed to follow the appropriate rulemaking process); *Arrow Air, Inc.* v. *Dole*, 784 F.2d 1118, 1122 (D.C. Cir. 1986) (listing agency intent as only one among other factors differentiating interpretive and legislative rules); *General Motors Corp.* v. *Ruckelshaus*, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (*en banc*), *cert. denied*, 471 U.S. 1074 (1985) (upholding agency's interpretation but finding agency's own label relevant but not dispositive).[2]

The likelihood, in whatever degree, that what the Commission calls guides are in fact rules under section 18(a)(1)(B) could easily have been avoided without diminishing the basic guidance the Commission seeks to offer. The Horizontal Merger Guidelines recently issued by the Commission and the Department of Justice, for example, refrain from definitive conclusions about what does or does not violate the law in various ways, one of which is by using the qualifier "likely." For example, in discussing the significance of post-merger market concentration measured by the Herfindahl-Hirschman Index ("HHI"), the Merger Guidelines say, "Where the post-merger HHI exceeds 1800, it will be presumed that mergers producing an increase in the HHI of more than 100 points are likely to create or enhance market power or facilitate its exercise." 1992 CCH Trade Cas. ¶ 13,104 at 20,573–9 (emphasis added).[3]

A similar approach could be used here. Instead of saying that a particular claim "is" or "is not" deceptive, the environmental guides could have said that a particular claim "is likely" or "is unlikely" to be deceptive. Although adding the qualifiers "likely" or "unlikely" sounds more tentative, if that language were used throughout the document, the basic message of the guides, which is to indicate the Commission's likely response in various hypothetical situations, would remain. If the Commission prefers the more definitive language because indeed it wants to be definitive about what is or is not deceptive, then it seems to me that the Commission runs squarely into the problem that it is in fact issuing rules rather than guides and confess some puzzlement about whether the Commission intends to be definitive (and issue rules) or to indicate what it is likely to do (and issue guides), but even more than that, I regret that the Commission has not seen fit to make this single change, which would have enabled me to join in making this a unanimous document.

Second, I differ from the Commission in its decision not to place the guides on the public record for a short period of time to enable the public to comment on them. Although we have sought to obtain accurate information and to consider the issues thoroughly, it is conceivable, nevertheless, that someone outside the agency might offer useful observations and suggestions for improvement. The Commission has obtained comment on the merits of issuing guidance and on the issues that such guides should address, but it has not provided to those affected by the guides an opportunity to assess the economic benefits and costs of the actual provisions or to call to our attention provisions that may cause unintended effects. A short, appropriately focused comment period on the guides could have coincided with the public comment period on the Environmental Assessment that is required under the National Environmental Policy Act of 1969, 42 U.S.C. 4321, as amended.

[FR Doc. 92-19359 Filed 8-12-92; 8:45 am]
BILLING CODE 6750-01-M

[1] Guides and trade practice rules issued before the enactment of section 18 and before the judicial decisions discussed below contain similarly didactic language.

[2] Although, as already noted, the law of the circuit is not settled, there is a serious possibility, and in my opinion likelihood, that the Court of Appeals for the District of Columbia Circuit, at least, would find that portions, if not all, of the guides just issued are legislative rules rather than interpretive rules or policy statements. Compare the *Fertilizer Institute* v. *EPA*, 935 F.2d 1303, 1307–08 (D.C. Cir. 1991) (quoting *General Motors Corp.* v. *Ruckelshaus*, *supra*, and *Citizens To Save Spencer County* v. *EPA*, 600 F.2d 844, 875 and n. 153 (D.C. Cir. 1979) ("distinction between interpretive and legislative rules depends on whether document 'merely states what the administrative agency thinks the statute means, and only reminds' affected parties of existing duties" or demonstrates that "the agency intends to create new law, rights or duties"), with *Alaska* v. *DOT*, 868 F.2d 441, 446–47 (D.C. Cir. 1989), and *Community Nutrition Institute* v. *Young*, *supra* at 947–48 (distinction depends on several factors including use of mandatory language, inclusion of exception process, practical application and limitations placed on agency discretion).

[3] Magnuson-Moss rulemaking procedures do not apply to antitrust rules, but the notice and comment rulemaking requirements in the Administrative Procedure Act ("APA") apply and presumably would have precluded the Commission and the Department from issuing the merger guidelines had they purported to bind the government or the public by requiring or prescribing particular conduct without first providing for public notice and comment. When it recently issued revisions to the so-called Fred Meyer Guides (Guides for Advertising Allowances and Other Merchandising Payments and Services, 55 FR 33 651 (Aug. 17, 1990)), under the antitrust laws, the Commission employed the appropriate APA rulemaking procedures.

COMMODITY FUTURES TRADING COMMISSION

17 CFR Parts 30 and 32

Offer and Sale of Foreign Exchange-Traded Options, and Foreign Exchange-Traded Futures Contracts Based on Foreign Stock Indexes and Foreign Government Debt, to Persons Located Outside the United States

AGENCY: Commodity Futures Trading Commission.

ACTION: Final order.

SUMMARY: Pursuant to its authority under sections 2(a)(1)(B), 4(b) and 4c(b)[1] of the Commodity Exchange Act ("CEA" or "Act") and rules 32.11 and 30.3(a),[2] and its determination that granting relief would not be inconsistent with the Act or the public interest, the Commodity Futures Trading Commission ("Commission") is providing relief to permit

(1) Futures commission merchants ("FCMs") to solicit and accept orders and funds for foreign exchange-traded

[1] Sections 2(a)(1)(B), 4(b) and 4c(b), 7 U.S.C. 5(b) and 6c(b).

[2] 17 CFR 32.11 and 30.3(a) (1992).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MA 02203-2211

DATE: April 19, 1994

SUBJ: **Region I Draft Administrative Procedures for Addressing Future Land Use Assumptions at Facilities under RCRA Corrective Action Prior to Final Remedy Selection**

FROM: Frank Ciavattieri, Acting Director
Waste Management Division

TO: RCRA Staff
RCRA Section Chiefs
WMD Branch Chiefs
RCRA ORC Attorneys

The purpose of this memo is to present the Region I administrative procedures for making future land use assumptions at facilities subject to RCRA Corrective Action prior to selection of a final remedy. Present and future land use assumptions are used in assessing baseline risks and in establishing Media Protection Standards for a facility. This memo replaces previous memos regarding future land use for facilities under RCRA Corrective Action. This memo is considered draft in light of ongoing consideration of future land use assumptions at the national level.

The following documents were relied upon in preparing this memo:

1. a letter dated February 25, 1993, Re: "Future Use Scenarios at the Engelhard Corporation Site" prepared by Andrea Simpson;

2. a letter dated October 14, 1993, Re: "Remington Arms Park Corrective Action .. Future Use Consideration" prepared by Deborah McKie;

3. Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities, Proposed Rule (Subpart S), 55 Fed. Reg. 30796.

Traditionally, it has been Region I's practice to use a residential scenario, as well as other scenarios that may be appropriate, for the purpose of conducting baseline risk assessments at Corrective Action and Superfund sites. In a few instances the Region has designated a non-residential use (commercial or industrial use) for a site prior to the selection of a remedy. In the Superfund Program, those decisions typically have been made at the second Management Review Meeting during the RI/FS process.

Decisions regarding current and future land use assumptions at Corrective Action facilities should be considered as early as possible in the Corrective Action process. A Management Review Meeting should be held when the RCRA Facility Manager (RFM) believes there is adequate information to consider whether a future non-residential use scenario is appropriate for a particular facility prior to remedy selection. If a non-residential facility use assumption is endorsed by management and if a risk exceedance is found, Media Protection Standards need to be developed based upon an on-site non-residential use, off-site groundwater use, or ecological risk. In this case, the appropriate exposure assumptions for on-site groundwater use is site-specific. Following the RFI/CMS, the selection of Media Protection Standards along with the appropriate institutional controls and financial assurance would be determined during the Management Review Meeting prior to issuing the Statement of Basis.

According to proposed Subpart S, contaminated soil should be remediated to levels consistent with plausible future patterns of use. For unrestricted access, soils would be remediated to levels appropriate for residential use. For sites located in industrial areas that are likely to remain industrial in the foreseeable future, exposure assumptions consistent with industrial land use and cleanup to less stringent levels might be appropriate, although institutional controls could be necessary to ensure that the use pattern did not change. See section V.B. (page 30804) of proposed Subpart S. Superfund is currently considering similar guidance for addressing current and reasonably expected land use for risk assessment early in the RI/FS process. In addition, the Administration's proposed Superfund re-authorization bill encourages early decisions on land use and early community involvement.

Local plans and community input are key factors for EPA in making current and future land use assumptions prior to selection of a remedy. Generally, EPA will not make a non-residential future use assumption prior to remedy selection without such community input. The burden rests with the facility to collect and present land use information if the facility feels making a non-residential future land use assumption prior to selection of the final remedy is appropriate. The consideration by EPA of a future non-residential use scenario early in the Corrective Action process typically will be triggered by a request from the facility or the community. In order to best determine the appropriate current and future use of a site prior to the time of remedy selection, the facility must submit supporting information including the following:

1. local zoning laws and zoning maps showing current zoning and future proposed changes,

2. location of the facility and surrounding land use;

3. proximity of the site to residential areas;

4. local development plans;

5. local population growth projections;

6. characteristics of neighboring properties;

7. concurrence of local officials;

8. groundwater use, groundwater classification, location of private wells, and the extent and characteristics of any off-site groundwater plume;

9. input from the public;

10. deed restrictions which the facility considers necessary to restrict the use of the land and groundwater to non-residential use;

11. a description of the institutional controls which the facility anticipates would be necessary to protect human health and the environment by preventing human exposure to contaminants; and

12. financial assurance mechanisms to fund future cleanup consistent with a residential use should conditions change.

The RFM should consult the previously mentioned letters sent to Engelhard and Remington Arms or other more recent correspondence for examples of these requirements. The RFM should review this information and hold technical discussions with his/her Section Chief, ORC, etc. prior to a Management Review Meeting.

Once there is adequate information to consider whether the future non-residential use of the property is appropriate, the RFM should prepare a recommendation regarding the current and future use of the site and convene a Management Review Meeting. The procedures for convening a Management Review Meeting are addressed in another, frequently updated memorandum. The possible outcomes of the Management Review Meeting include the following future use scenarios: residential, non-residential, or conditionally non-residential. If a residential future use scenario is chosen, the risk assessment and Media Protection Standards would be based on residential use (it is Region I policy to allow the facility to calculate baseline risks for other use scenarios as well). This does not preclude the later selection of a conditional remedy with institutional controls as the final remedy in a Statement of Basis. If a non-residential future use scenario is chosen, the risk assessment and Media Protection Standards need only be based on a non-residential

future use on-site, off-site groundwater and land use, and ecological risk, with the understanding that institutional controls and financial assurance will be part of the final remedy. If a conditional non-residential future use scenario is chosen, the risk assessment and Media Protection Standards would be provided for both residential and non-residential on-site future uses, and the final remedy would be conditioned on continued non-residential use of the site. In such a conditional remedy, the remedy would provide that if, in the future, use of the site were to change to something other than non-residential, additional remedial work would be necessary. Financial assurance typically would be part of the remedy to provide for this contingency.

Even if EPA accepts a facility's proposal to apply a non-residential scenario for the human health risk assessment for the site, the results of the ecological risk assessment and a review of the off-site exposures must still be considered when calculating the Media Protection Standards for the site. Based on the results of these two evaluations, the ecological risk assessment may be the driving factor in determining the cleanup levels for the facility.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

April 18, 1994

David Miu, RPM
U.S. Department of the Navy
Northern Division
10 Industrial Highway
Code 1823, Mail Stop 82
Lester, PA 19113-2090

RE: EPA's Comments on the Halliburton NUS Corporation letter
Dated March 28, 1994

Dear Mr. Miu:

The purpose of this letter is to transmit EPA's comments on the subject letter concerning Investigation-Derived Waste (IDW) disposal at the Naval Submarine Base - New London, Groton, Connecticut.

The referenced letter recommends disposal practices that are consistent with the objectives presented in EPA guidance document "Management of Investigation-Derived Wastes During Site Inspections", dated May 1991. The Navy should be aware that state regulations may be more stringent than federal and any final disposal decisions should be consistent with state regulations.

Discharge of pumping test water, decontamination water and well development and purge water into the base sewer system is one of the above referenced guidance document's recommended disposal methods provided that the discharge is in conformance with the POTW's discharge permit and that the discharge in conformance with the sewer discharge permit. This permit can be an amendment to the sewer discharge permit application on file now at the EPA and must be "in hand" prior to conducting the pump test. As the approval usually takes some time to secure, you should have been coordinating with Mr. Richard "Skip" Hull, Water Division EPA, at (617) 565-4881 who is working to develop other pre-treatment permits for New London. He can advise you as to the analysis and contaminate levels that will be required to be met prior to disposal.

Any containerized IDW must, at a minimum, be accumulated in accordance with State and Federal container management requirements for hazardous waste (i.e., drums in good condition, closed containers, etc.,) promulgated under the Resource

B 4/4 11:15

ENVIRONMENTAL

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

Phone #: Commercial (610) 595-0567
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FAX #: Commercial (610) 595-0555

FROM:

NAME: David Muir

PHONE: 610 595-0567 x 151

TO: Chargine Williams

ACTIVITY: EPA

FAX NUMBER: 617 573-9662

REMARKS: 4 pages total incl cover

DEX TRANSMITTED

BY:

DATE:

TIME:

Chargine.

Please review attached Halliburton's memo and provide written comments ASAP; NLT 4-06-94.

My fax number is 610-595-0555.

Thanks.

4.05.94.

INVESTIGATION - DERIVED WASTES

Five types of investigation-derived wastes (IDW) are being generated at Subase, NLON. These wastes include Personal Protection Equipment (PPE), pumping test water, drilling and sampling equipment decontamination water, well purge waters, and drill cuttings. A description of the recommended disposal procedures for each waste type is included in the following paragraphs. Pertinent page numbers of the EPA document titled "Management of Investigation - Derived Wastes During Site Inspections", EPA/540/G-91/009, May, 1991; will be referenced as appropriate for further guidance.

It should be noted that none of the IDW generated at Subase NLON are considered to be RCRA Hazardous waste due to the expected low levels of contamination, and the fact that no RCRA listed wastes were mixed with the IDW. The IDW will however, contain low levels of CERCLA hazardous substances.

PPE - PPE that has been collected during the field investigation has been decontaminated and bagged and deposited in the site dumpster in accordance with the recommended procedure on pages 23 and 25. Approximately a total of 50 garbage bags filled with PPE will be deposited in the dumpster during the course of the entire field investigation.

Recommendation - Continue current practice

PUMPING TEST WATER - A 72-hour pumping test will be conducted during the week of April 4, 1994 at the Area A landfill. Approximately 22,000 gallons of groundwater will be removed at a rate of 5 gallons per minute from pumping well 2LPW1S, which will require disposal. A sample of the groundwater was collected and sent to the laboratory for analyses of TCL volatile and semivolatile compounds.

Recommendation - Application has been made with the State of Connecticut for approval to dispose of this water to the base sewer system. Pending approval from the State, it is recommended that the water be disposed in this manner.

DRILL RIG DECONTAMINATION AND SAMPLING DECONTAMINATION WATER -

Approximately 4000 gallons of water has been collected as the result of steam cleaning operations and the rinsing of sampling equipment from various locations at the base. The water has been containerized in labeled, 55-gallon drums and stored at the equipment decontamination area near the Area A Landfill.

Recommendation - Application has been made with the State of Connecticut for approval to dispose of this water to the base sewer system. Pending approval from the State, it is recommended that the water be disposed in this manner.

WELL DEVELOPMENT AND PURGE WATER - Approximately 250 gallons of development and purge water from the first round of groundwater sampling has been collected in labeled 55- gallon drums and stored at the equipment decontamination area near the Area A Landfill.

Recommendation - Application has been made with the State of Connecticut for approval to dispose of this water to the base sewer system. Pending approval from the State, it is recommended that the water be disposed in this manner.

A total of approximately 500 gallons of groundwater will also be generated during monitoring well purging from the second round of groundwater sampling, which will be conducted in June, 1994. It is recommended that groundwater that has no expectation of contamination and is visually free from contaminants be discharged onto the ground surface next to the well to allow infiltration, as recommended on page 23 and 25 of the reference document. Ground water that is suspected to be contaminated will be collected and stored in labeled 55-gallon

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APR 7 1994

Ms. Nancy Donahue
IPEC, Inc.
200 Whitehall Street
Providence, RI 02909

Re: Dust Collector Filters

Dear Ms. Donahue:

This letter is in response to your letter dated March 11, 1994, requesting EPA's position on the applicability of certain portions of the regulations promulgated pursuant to the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et seq. to activities undertaken by your customers using dust collection systems manufactured by IPEC.

In your letter, you indicate that IPEC is a manufacturer of dust collection units. These units contain a filtration system that uses forty-two (42) separate filters to remove particulates from the air. These units are designed for two thousand (2,000) hours of repeated use before the filters in these systems require replacement. IPEC requests EPA to clarify whether federal regulations require the removal and replacement of these filters when the dust collection units are either used for different jobs or transported over the road.

Ken Rota, of my staff, indicated that he spoke with you on March 11, 1994 and March 25, 1994 and that, based on those conversations, you wished EPA to clarify whether or not the filters are classified as wastes prior to reaching their useful life.

In response to this clarification, EPA does not consider the filters a waste prior to reaching their useful life. When the filters have reached their useful life, they would be considered wastes and the generator of these used filters would, at a minimum, be required to conduct a hazardous waste determination to determine the regulatory status of these spent materials.

The interpretation above does not apply to any waste particulates that may be collected and/or stored by these filters. If the units are transported without emptying the filters, IPEC or its customers could be considered transporters of hazardous waste if the waste material met either the characteristic or listing criteria set forth in 40 C.F.R. Part 261. It was noted in your

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Fred Friedman

March 7, 1994

Mr. Jerry Gauthier
Department of Navy
Portsmouth Naval Shipyard
Portsmouth, NH 03804-5000

Dear Mr. Gauthier:

This letter is in response to your letter dated December 21, 1993 regarding the following issues:

- EPA's current and future procedures for fluorescent lamp disposal regulations.
- Does EPA have a standardized test in place for preparing florescent lamps for the Toxicity Test.

Under the hazardous waste regulations, each generator of a waste is responsible for making a hazardous waste determination under 40 CFR 262.11. If the waste exhibits one of the four characteristics of hazardous waste identified in subpart C of part 261 or is a waste listed in Subpart D of Part 261, it must be managed in accordance with the hazardous waste regulations. Therefore fluorescent lamps that meet the above criteria must be managed as a hazardous waste and disposed of at a hazardous waste facility in accordance with 40 CFR parts 264 or 265 and parts 268 and 270.

Regarding your question on future regulatory requirements for fluorescent lamps, there was published in the Federal Register on October 25, 1993 a Notice which indicates the Agency's intention to consider creating an exemption for fluorescent lamps (Attachment).

EPA has standard procedures for performing the TCLP test on the extract for a given sample of waste (40 C.F.R. 261 Appendix II). The only requirement is that a representative sample be taken. EPA does not have guidelines on how one would go about preparing

a fluorescent lamp for the TCLP test. Enclosed for your review is a report from the Science Application International Corporation that contains a summary of guidelines that they suggest if followed will yield accurate results.

If you have any questions regarding this matter you may contact Mel R. Cheeks at 617-223-5590.

Sincerely,

Matthew R. Hoagland, Chief
ME, NH, & VT
Waste Regulation Section

cc: [redacted]
Ken Rota
Lisa Papetti

Vol. 58 No. 204 Monday, October 25, 1993 p 56998 (RULES)

^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V^V
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3740. EXCLUSION OF FLUORESCENT LAMPS FROM THE HAZARDOUS WASTE MANAGEMENT SYSTEM

Legal Authority: 42 USC 6905; 42 USC 6912; 42 USC 6921; 42 USC 6922; 42 USC 6938

CFR Citation: 40 CFR 261

Legal Deadline: None

Abstract: This action is deregulatory. Used fluorescent lamps often test hazardous under the Toxicity Characteristic because of their mercury content. However, available information indicates that these lamps may not create an environmental problem when disposed in municipal landfills or sent to mercury reclamation facilities. In addition, there are substantial environmental benefits from using fluorescent lamps, primarily due to energy savings. Therefore, the Agency is considering options for exempting fluorescent lamps from Toxicity Characteristic and options for reducing Subtitle C requirements by including lamps in the ''Universal Waste'' rule.

Timetable:

Action	Date	FR Cite
NPRM	12/00/93	
Final Action	00/00/00	

Small Entities Affected: None

Government Levels Affected: None

Additional Information: SAN No. 3237.

Agency Contact: Valerie Wilson, Environmental Protection Agency, Solid Waste and Emergency Response, (OS-333), Washington, DC 20460, 202 260-4678

RIN: 2050-AD93

ANALYTICAL RESULTS OF MERCURY IN FLUORESCENT LAMPS

Submitted by

Science Applications International Corporation
7600-A Leesburg Pike
Falls Church, VA 22043

May 15, 1992

EPA Contract No. 68-W0-0027
SAIC Project No. 01-0825-03-0615-001

Submitted to:

Project Officer
David Topping
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

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March 4, 1994

Todd Leedberg, Waste Management Specialist
New Hampshire Department of Environmental Services
Hazardous Waste Compliance Section
6 Hazen Drive
Concord, NH 03301-6509

Dear Todd:

On or about December 29, 1992, Joan Jouzaitis of my staff received information from Robert A. Tardif of NHDES pertaining to Watts Regulator Company's (Watts) exportation of lead contaminated silica sand from its Jet Wheelblast finishing operation to Falconbridge/Kidd Creek smelting operations in Timmins, Ontario. Following is the Regional interpretation of the regulatory status of the lead contaminated sand, given the information provided by Watts and NHDES. We apologize for the delay in responding to your request for a regulatory interpretation on this issue, but as you know, we have been coordinating our effort with EPA headquarters in Washington, DC.

Lead Containing Sand - Characteristics & Intended Fate

The correspondence between Watts and NHDES indicates that the lead contaminated silica sand being shipped from Watts to Canada contains quantities of lead which have been shown to leach by the TCLP and EP toxicity tests (EP Toxicity - 73 mg/l lead, per laboratory test result dated 6/4/86; and TCLP - 130 mg/l lead, per laboratory results dated 8/17/90) and this sand is used as a flux in a Canadian copper smelter. Watts has claimed that the flux provided by their facility contains 2-5% copper and 80% silica, and is therefore an effective substitution for a commercial product, and thus is not regulated as a solid waste, in accordance with 40 C.F.R. § 261.2(e).

As Watts has stated in its letters to NHDES, the ultimate fate of the lead contained in the silica sand fed into the foundry operations is that it is caught up in the vitrified slag generated from smelting operations. This vitrified slag (which is blasted with water to form a granular grit) is either sold to the asphalt shingle industry as a grit additive, or disposed on-site in Canada. According to Watts, this grit is rendered unleachable, due to the vitrification process.

Considerations For Regulatory Interpretation

The regulation 40 C.F.R. § 261.2(e)(ii) states that materials are not solid wastes when they can be shown to be recycled by being used or reused as effective substitutes for commercial products. Watts states in a letter dated November 5, 1992 to John J. Duclos of NHDES that the lead containing silica sand is to be used as a flux additive, and enclosed a letter from Noranda (parent company of Kidd Creek) demonstrating that this material can be used as a flux additive. Watts also stated that "the silica is discharged directly into the flux feed hoppers without any preparation, recovery, or reclamation." Although the waste sand generated by Watts is a "spent material," it is similar to virgin silica used as a fluxing agent to remove metal contaminants (including lead) in the copper smelting process.

In its correspondence to EPA, Watts provided a copy of a draft agreement between itself and Noranda Sales Corporation (Noranda) as agent for and on behalf of Falconbridge Ltd., stating that there was an agreement to accept the material as a fluxing agent feedstock. It is clear that the smelter has accepted, and can use this material as a feedstock.

EPA Region I is forwarding you a copy of a memo dated April 26, 1989, from Sylvia K. Lowrance, Director of the Office of Solid Waste to Hazardous Waste Management Division Directors. This memo addresses the issue of whether a secondary material may be considered "commodity like." The considerations in making this determination are spelled out as follows: (1) whether the secondary material truly has value as a raw material/product (i.e., is it likely to be abandoned or mismanaged prior to reclamation rather than being reclaimed?) and 2) whether the recycling process (including ancillary storage) is likely to release hazardous constituents (or otherwise pose risks to human health and the environment) that are different from or greater than the processing of an analogous raw material/product. These considerations should be addressed by Watts in order to support NHDES's determination of the regulatory status of this material.

Conclusion

Watts should be required to demonstrate to NH DES that they have addressed the considerations set forth in Sylvia Lowrance's memo, above, in order to classify the lead contaminated silica sand as a non-hazardous waste. The first of these considerations is whether the secondary material truly has value as a raw material or product. Whether the lead contaminated silica sand is likely to be abandoned or mismanaged prior to reclamation rather than being reclaimed must also be addressed.

Noranda has stated in a letter to John P. Twombly of Watts Regulator, dated January 18, 1991, that "a sample of the foundary [sic] sand was analysed [sic] at our laboratory at Kidd Creek, and we believe, due to the high silica content, that this

material has the proper composition and consistency to be used as a fluxing agent. Our analysis shows that this material has value due to its intended practical application as a silica flux." The material being shipped from NH to Canada is useable, according to Watts.

Watts has stated that they must pay a fee of $65 per short wet ton of contaminated silica received at the smelter site. Watts should address, in correspondence to NH DES, why it must pay this fee. If this is related to the fact that Watts is only able to supply a few days supply of silica to the foundry, then this should be detailed in Watts response. (Mr. Twombly of Watts stated in a conversation with Joan Jouzaitis of EPA Region I on March 31, 1993, that his annual supply of silica sand provides only 5-8 days worth of flux for the foundry.) Watts should address the perceived conflict between the utility of using the lead contaminated silica sand vs. the monetary value of the lead contaminated silica sand.

The second consideration is whether the recycling process, as detailed by Watts, including storage and transport considerations, is likely to release hazardous constituents, or otherwise pose risks to human health and the environment) that are different from or greater than operation of the smelter with non lead contaminated sand used as the flux. As an example, it is not clear how Watts will store lead contaminated silica sand at its facility so as to pose minimal risk of harm to human health and the environment. NH DES may wish to further question Watts on its current storage practices for this material at its NH facility, as well as how the transportation of the material to Canada will be performed in a manner minimizing risk. Watts should be advised that mismanagement of the material, such as the uncontrolled storage of the sand on the ground, may be classified as use constituting disposal, which would result in the designation of the storage area as a Solid Waste Management Unit (SWMU). Releases from a SWMU could potentially subject the facility to corrective action responses.

The Canadian smelter currently manages lead containing ores, and should have some practices in place for limiting employee and environmental exposures to the lead. However, it is Watts' responsibility to detail to NH DES how the presence of the lead in the sand is not likely to release hazardous constituents that are different from or greater than the operation of the lead smelter with non lead contaminated sand used as the flux.

The unleachable, lead-containing grit generated in Canada by foundry operations would be regulated by all applicable Canadian laws and regulations.

So long as the considerations set forth in Sylvia Lowrance's letter are met, the lead contaminated silica identified above would not be a solid waste, and therefore would not be a federal hazardous waste. The shipment of the material to Canada would

not be subject to the hazardous waste exporting requirements. Please be advised that our assessment of the non-hazardous classification of these wastes is based solely upon the recycling scenario spelled out by Watts in its correspondence to NHDES, and that any changes in the proposed method of recycling may result in a change to the regulatory status for that specific material.

You may wish to look at Federal Register, Volume 50, No. 3, p. 638, dated January 4, 1985. This portion of the Federal Register for the recycling regulations provides guidance for determining whether a particular recycling operation constitutes a "sham" recycling operation. The preamble language states, among other things, that a secondary material must not be ineffective or marginally effective for its claimed use. Secondary materials that are ineffective or marginally effective for a claimed use are deemed "surrogate disposal." The preamble also states that secondary materials used in excess of the amounts necessary for operating a process or not handled in a manner consistent with their use as a raw material or commercial product substitute are further indications of a sham recycling operation.

A determination by the State or EPA that a particular recycling activity does not constitute a "sham" would also confirm that this secondary material is "commodity-like" and, therefore, would have an economic value at least equivalent to the commercial product this material is replacing.

Please call Joan Jouzaitis of my staff at (617) 573-5775 if you have any questions concerning this matter.

Sincerely,

Bruce Marshall

Bruce Marshall, Chief
RCRA Support Section

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2/18/94

Daniel Segall, Health and Safety Director
Coastal Energy Incorporated
12 Burton Street
Worcester, MA 01607-1004

Dear Mr. Segall:

This letter is in response to your February 2, 1994 letter requesting EPA's opinion of your proposed sampling protocol for construction and demolition debris for the hazardous characteristic lead. As I stated during our telephone conversation on January 31, 1994, sampling and analyses plans for hazardous wastes are designed on a case by case basis to account for the particular characteristics of the waste or wastes to be sampled. The main goal of any well designed hazardous waste sampling plan is to ensure that a representative sample of the waste is collected to accurately determine whether or not the waste may be hazardous.

Your description of the proposed methodology for sampling demolition and construction debris may be adequate provided the samples collected are representative of the waste. I have enclosed a section from EPA's Test Methods for Evaluating Solid Wastes SW-846 on sampling plans. This section describes a variety of ways in which wastes may be sampled and includes some examples for determining whether the samples collected are representative of the waste.

If you have any questions concerning this matter, please call me at (617) 573-5759. Charles Porfert of EPA's Environmental Services Division reviews EPA sampling and analysis plans and can be reached at (617) 860-4313.

Sincerely,

Kenneth Rota

Kenneth B. Rota, Environmental Protection Specialist
RCRA Support Section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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2/11/94

February 11, 1994

Mr. Robert Ankstitus
Rizzo Associates
235 West Central Street
Natick, MA 01760

Dear Mr. Ankstitus:

Your letter, received by this office on January 6, 1994, requests a determination on whether the treatment of lead contaminated soils in a pug mill would be exempt from federal permit requirements.

The federal regulations allow on-site treatment of hazardous waste in tanks or containers without a permit, as long as the treatment conforms with the requirements of 40 C.F.R. §262.34 (accumulation time) and Subparts I and J of 40 C.F.R. Part 265 (tank and container standards). Title 40 C.F.R. § 260.10 defines a container as "any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled." The pug mill described in your submittal may fit the RCRA definition of container. If so, hazardous waste treatment occurring in this device, under the conditions cited above, would be part of the permitting exemption.

The treatment process described in your submittal describes the stockpiling of the contaminated soil/chemical mixture while the mixture is curing. EPA would consider the curing period to be part of the treatment process. Therefore, this process must also be conducted in a tank or container in order to make the entire process exempt from permitting. Finally, it is important to note that the entire treatment and curing process would have to occur within ninety days.

You should also be aware that the MA DEP has permitting standards that may be different from those of EPA. You may want to contact them prior to initiating this project. If you have any questions about these issues, please contact Lisa Papetti of my staff at 573-5745.

Sincerely,

Gary B. Gosbee, P.E., Chief
MA & RI Waste Regulation Section

cc: Lisa Papetti, EPA
Steve DeGabriele, MA DEP

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January 31, 1994

Mr. Christopher S. Way
Waste Management Specialist
New Hampshire Department of Environmental Services
Waste Management Division
6 Hazen Drive
Concord, NH 03301-6509

Dear Mr. Way:

This letter is in response to your May 28, 1993 inquiry. In your letter, you state that a New Hampshire facility proposes to recover terpene by recycling hazardous wastewater generated by its Massachusetts facility. Your main concern was whether the owner of the New Hampshire recycling facility would be subject to permit requirements under 40 CFR Parts 264 and 265 if it could be designed to operate without storing the waste.

Title 40 C.F.R. § 261.6(c)(2) states that owners or operators of facilities that recycle recyclable materials without first storing them are subject to notification requirements under Section 3010 of RCRA, 42 U.S.C. 6930 and the regulations requiring that hazardous wastes be properly manifested, set out at 40 C.F.R. §§ 265.71 and 265.72. Also, the air emissions standards of Part 264, Subparts AA and BB, apply to owners or operators of facilities subject to RCRA permitting requirements operating hazardous waste management units that recycle hazardous wastes.

In answer to your questions regarding transfer of waste from the vehicle to the process, and the use of feed hoppers/tanks, the Region has consulted with the Department of Transportation (DOT), and offers the following interpretation. The Transfer of Hazardous waste from a vehicle directly into a recycling process does not constitute storage, provided that the vehicle is unloaded in accordance with the DOT regulations found at 49 C.F.R. Part 177, Subpart B. Those regulations state that a vehicle is "unloading" when it is "attended," as defined at 49 C.F.R. § 177.834(h)(3). Further, the individual " attending" the unloading must be "qualified," as defined at 49 C.F.R. § 177.834(h)(4). Should the recycling unit malfunction, a storage

determination may be made on a case by case basis (e.g. storage may result if the recycling unit was inoperative for several days). The waste is considered "stored" in the vehicle for regulatory purposes when: a) the motive power is removed from the vehicle, b) the vehicle is not attended; c) the delivery hose or mechanism is not directly piped into the recycling process, or; d) the flow of waste into the recycling unit is interrupted. The regulatory agency will determine if the flow has been interrupted on a case by case basis, and take into account the manner in which the particular unit operates.

EPA is enclosing a copy of the applicable DOT regulations for your reference.

EPA generally considers feed tanks/hoppers to be an essential component of a recycling unit. However, the feed tank/hopper must provide a steady flow of waste to the recycling process, and their capacity should be no greater than the hourly rated capacity of the recycling unit. Alternately the feed tank/hopper's capacity could equal the minimum volume necessary to provide a steady flow of waste to the recycling unit, whichever is less.

We are enclosing a copy of the April, 1987 RCRA Hotline Report. This document answers a question regarding storage prior to recycling and provides some additional guidance on this issue.

The proposed use of an evaporation unit to treat the remaining hazardous wastewater would require a permit. Such units are regulated under 40 C.F.R. Part 264, Subpart X, which sets out the permit requirements for miscellaneous units. However, EPA does allow the treatment of hazardous waste in tanks or containers without a permit, provided that: a) Subpart I (Use and Management of Containers) and Subpart J (Tank Systems) of Parts 264 or 265 are complied with; b) the waste is stored for Less than 90 days, and; c) all applicable requirements of 40 CFR Part 268 (Land Disposal Restrictions) are met (p.g.10168/FR/Vol. 51, No./Monday, March 24, 1986).

Finally, your letter,expresses concern that requirements in addition to the standard permit provisions might be advisable in order to obviate the danger that recycling facilities might

operate inadequately and yet not be accountable for clean up costs or public health liability. RCRA allows States to promulgate more stringent RCRA requirements than those set out in the federal regulations. Such State regulations might require additional permitting requirements to ensure added protection to human health and the environment.

If you have any questions regarding these matters, please contact Mel Cheeks at 617-223-5590

Sincerely,

Matthew R. Hoagland, Chief
ME, NH & VT Waste Regulation Section

CC; Joshua Secunda, ORC
Ken Rota, RCRA Support
Joan Jouzaitis, RCRA Support

II. SIGNIFICANT QUESTIONS AND RESOLVED ISSUES

A. RCRA

1. Storage Prior to Recycling

According to the hazardous waste recycling regulations promulgated as part of the January 4, 1985 rule (50 FR 614), owners or operators of facilities that recycle materials without prior storage are subject only to Section 3010 notification requirements and §265.17 and §265.72 manifest regulations per §261.6(c)(2). Do the two following recycling operations involve storage prior to recycling?

(a) Truck drivers with bulk shipments or drums of spent solvent pour the solvent into a receiving bin at a recycling facility. The receiving bin is directly hard-piped to the distillation unit, such that the receiving bin feeds the distillations unit. When the distiller is non-operational (at night), some waste solvents may remain in the feed tank.

(b) As in the first situation, bulk shipments or drum of spent solvent are poured into a receiving device at a second recycling facility. The receiving device is essentially a tank with a pump in the bottom which is connected to a large tube that directly feeds into the distillation unit. The pump is in operation whenever there is waste in the tank. Therefore, the tank never contains solvent when the distillation unit is not in operation.

(a) Although there is no time limit for storage, the two recycling facilities are fundamentally different. The first recycler uses the receiving bin to store waste when the distillation unit is not operating. Per §261.6(c)(1), he is subject to the storage standards.

(b) In the case of the second recycler, he does not use the receiving bin for storage. His receiving bin is more clearly used only for conveyance, not storage. The bin is more directly tied to the operation of the recycling unit and indeed, could be viewed as part of the recycling unit. Hence, the second recycler would only be subject to §261.6(c)(2) (i.e., getting an EPA ID number and complying with the manifest standards.)

Source: Matt Straus (202) 475-8551
Research: Kim Gotwals

(c) A carrier (or ...ent) who operates a motor vehicle which contains a package of highway route controlled quantity radioactive materials as defined in § 173.403(l) of this subchapter shall prepare a written route plan and supply a copy before departure to the motor vehicle driver and a copy to the shipper (before departure for exclusive use shipments, or otherwise within fifteen working days following departure). Any variation between the route plan and routes actually used, and the reason for it, shall be reported as an amendment to the route plan delivered to the shipper as soon as practicable but within 30 days following the deviation. The route plan shall contain:

(1) A statement of the origin and destination points, a route selected in compliance with this section, all planned stops, and estimated departure and arrival times; and

(2) Telephone numbers which will access emergency assistance in each state to be entered.

(d) No person may transport a package of highway route controlled quantity radioactive materials as defined in 173.403(l) of this subchapter, on a public highway unless:

(1) The driver has received within the two preceding years, written training on:

(i) Requirements in Parts 172, 173, and 177 of this subchapter pertaining to the radioactive materials transported;

(ii) The properties and hazards of the radioactive materials being transported; and

(iii) Procedures to be followed in case of an accident or other emergency.

(2) The driver has in his immediate possession a certificate of training as evidence of training required by this section, and a copy is placed in his qualification file (see § 391.51 of this title), showing:

(i) The driver's name and operator's license number;

(ii) The dates training was provided;

(iii) The name and address of the person providing the training;

(iv) That the driver has been trained in the hazards and characteristics of highway route controlled quantity radioactive materials, and

(v) A statement by the person providing the training that information on the certificate is accurate.

(3) The driver has in his immediate possession the route plan required by paragraph (c) of this section and operates the motor vehicle in accordance with the route plan.

(e) A person may transport irradiated reactor fuel only in compliance with a plan if required under § 173.22(c) of this subchapter that will ensure the physical security of the material. Variation for security purposes from the requirements of this section is permitted so far as necessary to meet the requirements imposed under such a plan, or otherwise imposed by the U.S. Nuclear Regulatory Commission in 10 CFR Part 73.

(f) Except for packages shipped in compliance with the physical security requirements of the U.S. Nuclear Regulatory Commission in 10 CFR Part 73, each carrier who accepts for transportation a highway route controlled quantity of radioactive material (see § 173.401(d)), shall, within 90 days following the acceptance of the package, file the following information concerning the transportation of each such package with the Director, Office of Hazardous Materials Transportation, RSPA:

(1) The route plan required under paragraph (c) of this section, including all required amendments, reflecting the routes actually used.

(2) A statement identifying the names and addresses of the shipper, carrier and consignee, and

(3) A copy of the shipping paper or the description of the radioactive material in the shipment required by §§ 172.202 and 172.203 of this subchapter.

(49 U.S.C. 1803, 1804, 1808, 19 CFR 1.54, App. A to Part 1)

[Approved by the Office of Management and Budget under Control number 2137-0510]

[Amdt. 177-52, 46 FR 5346, Jan. 19, 1981, as amended by Amdt. 177-57, 48 FR 10247, Mar. 10, 1983; Amdt. 177-58, 48 FR 17091, Apr. 21, 1983; Amdt. 177-68, 51 FR 5975, Feb. 18, 1986; Amdt. 177-71, 52 FR 30672, Aug. 17, 1987; 53 FR 16092, May 12, 1988]

§ 177.826 Carrier's registration statement. Flammable cryogenic liquid.

(a) No person may transport a flammable cryogenic liquid in a portable tank or a cargo tank, unless he has filed a registration statement by certified mail, return receipt requested, with the Director, OHMT, RSPA in accordance with paragraphs (b), (c) and (d) of this section.

(b) The registration statement must contain the following information:

(1) The carrier's name and principal place of business.

(2) Locations where cargo tanks used to transport flammable cryogenic liquids are domiciled.

(3) The serial number or vehicle identification number of each cargo tank used by the carrier to transport flammable cryogenic liquids, and the name of each flammable cryogenic liquid transported in each cargo tank.

(c) The registration statement must be filed:

(1) Initially between January 1 and February 28, 1985 (this initial statement is only required to contain information regarding operations that took place during the 90 days prior to the date of the statement); and

(2) Subsequently, between January 1 and February 28 of each odd numbered year after 1985.

(d) For equipment obtained or operations begun between the two year filing intervals specified in paragraph (c) of this section, the information must be provided on the registration statement filed during the next required filing period.

(Approved by the Office of Management and Budget under control number 2137-0541)

(49 U.S.C. 1803, 1804, 1808, 19 CFR 1.54, App. A to Part 1)

[Amdt. 177-60, 48 FR 27700, 27714, June 16, 1983; 48 FR 50112, Nov. 1, 1983]

Subpart B—Loading and Unloading

Note: For prohibited loading and storage of hazardous material, see § 177.848.

§ 177.841 General requirements.

(a) *Packages secured on a vehicle.* Any tank, barrel, drum, cylinder or other packaging, not permanently attached to a motor vehicle, which contains any flammable liquid, compressed gas, corrosive material, poisonous material, or radioactive material must be secured against movement within the vehicle on which it is being transported under conditions normally incident to transportation.

(b) *No hazardous materials on pole trailers.* No hazardous material may be loaded into or on or transported in or on any pole trailer.

(c) *No smoking while loading or unloading.* Smoking on or about any motor vehicle while loading or unloading any explosive, flammable liquid, flammable solid oxidizing material or flammable compressed gas into or from any motor vehicle is forbidden.

(d) *Keep fire away, loading and unloading.* Extreme care shall be taken in the loading or unloading of any explosive, flammable liquid, flammable solid oxidizing material or flammable compressed gas into or from any motor vehicle to keep fire away and to prevent persons in the vicinity from smoking, lighting matches or carrying any flame or lighted cigar, pipe or cigarette.

(e) *Handbrake set while loading and unloading.* No hazardous material shall be loaded into or on or unloaded from any motor vehicle unless the handbrake be securely set and all other reasonable precautions be taken to prevent motion of the motor vehicle during such loading or unloading process.

(f) *Use of tools, loading and unloading.* No tools which are likely to damage the effectiveness of the closure of any package or other container, or likely adversely to affect such package or container, shall be used for the loading or unloading of any explosive or other dangerous article.

(g) *Prevent relative motion between containers.* Containers of explosives, flammable liquids, flammable solids, oxidizing materials, corrosive materials, compressed gases, and poisonous liquids or gases, must be so braced as to prevent motion thereof relative to

...e vehicle while ...ust contain ...s having valves ...other fittings ...ust be so loaded that there will be ...e minimum likelihood of damage ...ereto during transportation.

...(b) *Precautions concerning contain...s in transit; fueling road units.* Rea...nable care should be taken to pre...nt undue rise in temperature of con...ners and their contents during tran... There must be no tampering with ...ch container or the contents thereof ...r any discharge of the contents of ...y container between point of origin ...d point of billed destination. Dis...arge of contents of any container, ...her than a cargo tank, must not be ...de prior to removal from the motor ...hicle. Nothing contained in this ...ragraph shall be so construed as to ...ohibit the fueling of machinery or ...hicles used in road construction or ...intenance.

...(l) *Attendance requirements.* (1) *...ading.* A cargo tank must be attend... by a qualified person at all times ...en it is being loaded. The person ...o is responsible for loading the ...rgo tank is also responsible for en...ring that it is so attended.

...(2) *Unloading.* A motor carrier who ...nsports hazardous materials by a ...go tank must ensure that the cargo ...nk is attended by a qualified person ...all times during unloading. Howev... the carrier's obligation to ensure ...endance during unloading ceases ...en:

...(i) The carrier's obligation for trans...rting the materials is fulfilled;

...(ii) The cargo tank has been placed ...on the consignee's premises; and

...(iii) The motive power has been re...ved from the cargo tank and re...ved from the premises.

...(3) A person "attends" the loading ... unloading of a cargo tank if, ...roughout the process, he is awake, ...s an unobstructed view of the cargo ...nk, and is within 7.62 meters (25 ...t) of the cargo tank.

...(4) A person is "qualified" if he has ...en made aware of the nature of the ...zardous material which is to be ...ded or unloaded, he has been in...ucted on the procedures to be fol...ed in emergencies, he is authorized ...move the cargo tank, and he has ... means to do so.

(5) A delivery hose, when attached to the cargo tank, is considered a part of the vehicle.

(j) *Prohibited loading combinations.* In any single driven motor vehicle or in any single unit of a combination of motor vehicles, hazardous materials shall not be loaded together if prohibited by loading and storage chart, § 177.848. This section shall not be so construed as to forbid the carrying of materials essential to safe operation of motor vehicles. (See Motor Carrier Safety Regulations Part 393 of this title.)

(k) [Reserved]

(l) *Use of cargo heaters when transporting certain hazardous material.* Transportation includes loading, carrying, and unloading.

(1) *When transporting explosives.* A motor vehicle equipped with a cargo heater of any type may transport explosives only if the cargo heater is rendered inoperable by: (i) Draining or removing the cargo heater fuel tank; and (ii) disconnecting the heater's power source.

(2) *When transporting certain flammable material.* (i) *Use of combustion cargo heaters.* A motor vehicle equipped with a combustion cargo heater may be used to transport flammable liquid or flammable gas only if each of the following requirements are met:

(A) It is a catalytic heater.

(B) The heater's surface temperature cannot exceed 130° F (54° C), either on a thermostatically controlled heater or on a heater without thermostatic control when the outside or ambient temperature is 60° F (15.6° C) or less.

(C) The heater is not ignited in a loaded vehicle.

(D) There is no flame, either on the catalyst or anywhere in the heater.

(E) The manufacturer has certified that the heater meets the requirements under paragraph (l)(2)(i) of this section by permanently marking the heater *"MEETS DOT REQUIREMENTS FOR CATALYTIC HEATERS USED WITH FLAMMABLE LIQUID AND GAS."*

(F) The heater is also marked *"DO NOT LOAD INTO OR USE IN CARGO COMPARTMENTS CONTAINING FLAMMABLE LIQUID OR GAS IF FLAME IS VISIBLE ON CATALYST OR IN HEATER."*

(G) Heater requirements under § 393.77 of this title are complied with.

(ii) *Effective date for combustion heater requirements.* The requirements under paragraph (l)(2)(i) of this section govern as follows:

(A) Use of a heater manufactured after November 11, 1975, is governed by every requirement under (l)(2)(i) of this section.

(B) Use of a heater manufactured before November 15, 1975, is governed only by the requirements under (l)(2)(i) (A), (C), (D), (F) and (G) of this section until October 1, 1976, and

(C) Use of any heater after September 30, 1976, is governed by every requirement under paragraph (l)(2)(i) of this section.

(iii) *Restrictions on automatic cargo space heating temperature control devices.* Restrictions on these devices have two dimensions. Restrictions upon use and restrictions which apply when the device must not be used.

(A) *Use restrictions.* An automatic cargo space heating temperature control device may be used when transporting flammable liquid or flammable gas only if each of the following requirements is met:

(1) Electrical apparatus in the cargo compartment is nonsparking or explosion proof.

(2) There is no combustion apparatus in the cargo compartment.

(3) There is no connection for return of air from the cargo compartment to the combustion apparatus.

(4) The heating system will not heat any part of the cargo to more than 130° F (54° C).

(5) Heater requirements under § 393.77 of this title are complied with.

(B) *Protection against use.* Flammable liquid or flammable gas may be transported by a vehicle, which is equipped with an automatic cargo space heating temperature control device that does not meet each requirement of paragraph (l)(2)(iii)(A) of this section, only if the device is first rendered inoperable, as follows:

(1) Each cargo heater fuel tank, if other than LPG, must be emptied or removed.

(2) Each LPG fuel tank for automatic temperature control equipment must have its discharge valve closed and its fuel feed line disconnected.

(m) Tanks constructed and maintained in compliance with Spec. 106A or 110A (§§ 179.300–179.401 of this subchapter) that are authorized for the shipment of hazardous materials by highway in Part 173 of this subchapter must be carried in accordance with the following requirements:

(1) Tanks must be securely chocked or clamped on vehicles to prevent any shifting.

(2) Equipment suitable for handling a tank must be provided at any point where a tank is to be loaded upon or removed from a vehicle.

(3) No more than two cargo carrying vehicles may be in the same combination of vehicles.

(4) Compliance with §§ 174.200 and 174.201 of this subchapter for combination rail freight highway shipments and for trailer on flat car service is required.

(n) Specification 56, 57, IM 101, and IM 102 portable tanks, when loaded, may not be stacked on each other nor placed under other freight during transportation by motor vehicle.

[29 FR 18795, Dec. 29, 1964. Redesignated at 32 FR 5606, Apr. 5, 1967]

EDITORIAL NOTE: For Federal Register citations affecting § 177.841, see the List of CFR Sections Affected appearing in the Finding Aids section of this volume.

§ 177.848 Explosives.

(See also § 177.841 (a) to (j).)

(a) *Engine stopped.* No explosives shall be loaded into or on or be unloaded from any motor vehicle with the engine running.

(b) *Care in loading, unloading or other handling of explosives.* No bale hooks or other metal tool, shall be used for the loading, unloading, or other handling of explosives; nor shall any package or other container of explosives, except barrels or kegs, be rolled. No packages of explosives shall be thrown or dropped during process of loading or unloading or handling of

managed, the Agency has decided to impose manifest requirements on these generators, except in the case of certain reclamation agreements. The existence of a State-approved collection center does not, on its own, provide assurance that the waste would be transported or handled properly prior to or during transportation to such a facility, or indeed, that the shipment would ever reach such a facility. Consequently, development of some recordkeeping and transportation requirements would be needed which would offset any potential savings of such an exemption.

E. Part 264/265 Facility Standard Issues

The requirements for facilities that treat, store, or dispose of hazardous waste are contained in Parts 264 and 265 of the hazardous waste regulations. The Part 265 standards are applicable to facilities under interim status, a condition which allows a facility to continue operating until it receives a full RCRA permit. See HSWA section 3005(e)). The Part 264 standards establish the minimum standards to be incorporated into a full RCRA permit by EPA or a State with an EPA authorized hazardous waste program.

Section 261.5(b) previously exempted generators of 100–1000 kg/mo of hazardous waste from the facility requirements of Parts 264 and 265 that cover the on-site treatment, storage, or disposal of hazardous waste, provided the facility is at least approved by a State to manage municipal or industrial (non-hazardous) solid waste and no more than 1000 kg of hazardous waste were accumulated at any time. Under the rules promulgated today, this exemption will continue to apply only to generators of less than 100 kg/mo of hazardous waste. Generators of 100–1000 kg/mo of hazardous waste will be subject to full regulation under Parts 264 and 265 if they accumulate hazardous waste on-site for greater than 180 (or 270) days, exceed the 6000 kg accumulation limit, engage in waste treatment in other than tanks, or manage their waste in surface impoundments, waste piles, landfills, or land treatment facilities. In addition, those State-approved municipal or industrial waste facilities that manage wastes only from generators of 100–1000 kg/mo will also no longer be exempted from the Part 264 and 265 permit requirements. In the proposed rule, the Agency requested comments concerning the application of the uniform Part 264 and 265 requirements to generators of 100–1000 kg/mo and to the treatment, storage, and disposal facilities that accept waste from the generators.

1. Activities Requiring Permits.

Under today's final rules, 100–1000 kg/mo generators will be required to obtain a permit if they treat or dispose of hazardous waste on-site, except for treatment in tanks or containers during the 180/270 day accumulation period in conformance with Subparts J or I of Part 265, respectively, or accumulate hazardous waste on-site in tanks or containers for more than 180 or 270 days.

A number of commenters agreed with the need to manage wastes from generators of 100–1000 kg/mo at fully permitted facilities. They argued that no special exemptions or requirements should be applied to the management of waste from these generators because the characteristics of the waste, not the source of the waste, poses the threat to human health and the environment.

Two commenters opposed the requirement for generators of 100–1000 kg/mo who accumulate waste on-site for longer than 180 (or 270) days to obtain RCRA permit, and argued that the accumulation time limit before permitting is required should be extended. One of the commenters also maintained that determining the maximum quantity of hazardous waste that may be accumulated at a non-permitted facility should be based on the degree of hazard posed by the waste and the generator's capacity to transport the waste off-site. The EPA disagrees with both of these positions. As noted in Unit III.C.4.a. of today's preamble, the HSWA of 1984 clearly limit Agency discretion in this matter. The Agency carries a heavy burden in extending the time limits established under section 3001(d)(6), and except for emergency circumstances, the Agency does not believe there to be sufficient justification for extending the limits Congress has established.

Another commenter opposed any permitting requirement due to the economic burden that would be placed on a small number of generators. While some generators of 100–1000 kg/mo may be burdened financially by the requirements promulgated today, Congress has already judged that outside of the accumulation limits allowed for in Section 3001(d)(6), disposal of wastes from these generators at permitted facilities is necessary to protect human health and the environment. In addition, since the rules allow generators to manage their hazardous wastes off-site, they are able to avoid the cost of acquiring a RCRA permit, if they so choose.

Several commenters suggested exemptions from the RCRA permitting requirements or reduced permit requirements for on-site waste treatment. Some commenters stated that there is a need to encourage on-site treatment to reduce the amount of wastes sent off-site and that the permitting requirements may hamper the ability of generators to treat wastes at their facilities.

The Agency disagrees that on-site treatment should be encouraged by exempting those generators of 100–1000 kg/mo from the RCRA permitting requirements. To the extent that these generators are conducting the same treatment, storage or treatment, disposal as other permitted facilities, their on-site treatment activities pose a potential risk to human health and the environment. Therefore, reduced or eliminated permitting requirements would be inappropriate.

Of course, no permitting would be required if a generator chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of § 262.34 and Subparts J or I of Part 265. Nothing in § 262.34 precludes a generator from treating waste when it is in an accumulation tank or container covered by that provision. Under the existing Subtitle C system, EPA has established standards for tanks and containers which apply to both the storage and treatment of hazardous waste. These requirements are designed to ensure that the integrity of the tank or container is not breached. Thus, the same standards apply to a tank or a container, regardless of whether treatment or storage is occurring. Since the same standards apply to treatment in tanks as applies to storage in tanks, and since EPA allows for limited on-site storage without the need for a permit or interim status (90 days for over 1000 kg/mo generators and 180 (270 days for 100–1000 kg/mo generators), the Agency believes that treatment in accumulation tanks or containers is permissible under the existing rules, provided the tanks or containers are operated strictly in compliance with all applicable standards. Therefore, generators of 100–1000 kg/mo are not required to obtain interim status and a RCRA permit if the only on-site management which they perform is treatment in an accumulation tank or container that is exempt from permitting during periods of accumulation (180 or 270 days).

Two commenters suggested that a mechanism should be created to tailor RCRA permits to the circumstances of individual facilities. For example, one commenter specifically asked for a simplified and streamlined permit for the incineration of spent paint spray